

FURTHER NOTES ON AUSTRALIAN COLEOPTERA,  
WITH DESCRIPTIONS OF NEW GENERA AND  
SPECIES.

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XVIII.

CARABIDÆ.

AGONOCHILA.

*A. Koebeleri*, sp. nov. Breviter pubescens; picea, capite prothoraceque plus minusve rufescentibus, elytris fasciis 2 irregularibus valde contortis pallide testaceis ornatis, antennis palpis pedibusque testaceis; prothorace fortiter transverso, antice parum emarginato, crebre leviter minus subtiliter punctulato, lateribus fere æqualiter rotundatis bisetosis, angulis posticis fere rectis; elytris vix striatis, fere ut prothorax punctulatis. Long.,  $1\frac{1}{2}$  l.; lat.,  $\frac{4}{5}$  l.

This species may be readily distinguished by its small size and the unusual markings of its elytra. These latter consist of two strongly zigzag fasciæ the anterior of which is much wider than the posterior, its zigzags so strong as to extend from near the base of the elytra to considerably behind their middle. The posterior fascia is subapical. The markings bear a certain resemblance to those of *Eucalyptocola Mastersi*, Macl., but the two insects are very widely distinct.

N. Queensland; presented to me by Mr. Koebele.

*A. stictica*, sp. nov. Breviter pubescens; picea vel rufo-picea, antennis palpis pedibusque testaceis, elytris maculis testaceis senis elongatis (his longitudinaliter positis) ornatis; prothorace fortiter transverso, antice emarginato, leviter subtiliter (ad latera magis crasse) punctulato, lateribus bisetosis medium versus perspicue angulatis pone medium manifeste sinuatis, angulis posticis rectis; elytris vix striatis, subtilius sat fortiter sat crebre punctulatis. Long.,  $1\frac{3}{4}$  l.; lat.,  $\frac{4}{5}$  l.

Readily distinguished from the preceding structurally by the distinctly angulate sides of its prothorax. Very distinct from its previously described congeners by the markings of its elytra which seem to be quite constant though more or less conspicuous according as the ground-color is darker or lighter. They consist on each elytron of six testaceous elongate spots placed as follows:—One almost touching the base, two placed side by side about

the middle (the external one a trifle more anterior than the other), three near the apex placed side by side. In some examples the two middle spots just touch each other and in some the three subapical spots are slightly in contact with each other. In some examples the lateral border of the elytra is more or less pallid.

N. Queensland ; presented to me by Mr. Koebele.

#### SCOPODES.

*S. intricatus*, sp. nov. Breviter ovalis ; sat nitidus ; niger, capite prothorace que cupreis, elytris lineis subtilibus albis intricate reticulatim ornatis, antennis ferrugineis ; capite supra longitudinaliter striolato ; prothorace quam caput angustiori, supra fortiter striolato, haud canaliculato, fortiter transverso, latitudine majori longe ante medium posita, angulis posticis dentiformibus, lateribus mox pone marginem anticum fortiter angulatis hinc ad basin subrectis ; elytris striatis, interstitiis inæqualiter convexis ( $3^{\circ}$  3-foveolato). Long.,  $1\frac{3}{5}$  l. ; lat.,  $\frac{7}{10}$  l.

Readily recognisable by the curious reticulation of fine white lines with which its elytra are ornamented ; also notable for the coarse striolation of its prothorax which distinguishes it from all its described congeners except *S. rugatus*, Blackb. ; from this latter it is very distinct *inter alia* by its prothorax (even in the middle) scarcely being lobed or produced hindward behind a straight line joining the dentiform hind angles.

N. Queensland ; presented to me by Mr. Koebele.

#### STAPHYLINIDÆ.

BARRONICA (gen. nov. *Aleocharinarum*).

*Myllænam simulans* ; antennæ breves (his speciei typicæ quam prothoracis latitudo brevioribus) robustæ, articulis basalibus 2 sat æqualibus,  $3^{\circ}$  breviori et angustiori,  $4^{\circ}$   $5^{\circ}$  que etiam brevioribus,  $6^{\circ}$ — $10^{\circ}$  ex ordine latioribus ( $8^{\circ}$ — $10^{\circ}$  transversis),  $11^{\circ}$  longitudine  $8^{\circ}$ — $10^{\circ}$  conjunctis æquali ; caput in prothorace profunde immersum (superne haud præter naturam exsertum vix visibile) ; palpi maxillares modici, articulo apicali abrupte gracili ; prothorax semicircularis (fere ut *Corylophi*) transversus ; scutellum minutum ; elytra quam longiora fere duplo latiora ; abdomen pergracile, marginatum, a basi ad apicem fortiter angustatum (ut *Conuri*) ; pedes modici, tarsis anticis 4-articulatis, posterioribus 4 5-articulatis, posticis quam tibiæ vix brevioribus (articulo basali quam sequentes 3 vix breviori) ; coxæ inter mediis inter se modice disjunctæ.

I have unfortunately not been able to dissect a specimen successfully enough to ascertain all the characters satisfactorily and

so have had to omit some of them, but the characters specified above will enable this genus to be recognised readily. The minute insect on which it is founded is one of the most remarkable species I have seen and seems to have no near ally previously named, and I am in doubt where it should be placed. A casual glance would at once suggest placing it near *Myllena* but its much shorter palpi and short stout antennæ seem inconsistent with such a place; I can however suggest no better. Its most remarkable character I think consists in the relation of its head and prothorax to each other which is almost exactly as in *Corylophus*, the small head being in repose laid back flat against the under-surface of the prothorax so as to be entirely invisible from above, and the outline of the prothorax being evenly semicircular so that there is no trace whatever of any front angles. The front part of the prothorax moreover is roundly declivous in front and when the head is laid back underneath projects freely over it exactly as in *Corylophus*. Another very notable character is found in the general form (which is an extreme exaggeration of that of *Myllena*); the prothorax and elytra are exactly applied to each other so that their outline is perfectly continuous and forms a wide oval; the slender *Conurus*-like hind body looks like a thin tail and when it is raised upward the body has much the appearance of that of a miniature scorpion.

*B. scorpio*, sp. nov. Antice lata, depressa; nigra, antennis (apice infuscato excepto) flavis, pedibus piceis vel plus minusve sordide testaceis; subtiliter pubescens; prothorace ad elytra arcte applicato, his longitudine sat æquali, transverso, semicirculari, postice bisinuato, subtilissime punctulato, angulis posticis retrorsum productis; elytris quam longioribus fere duplo latioribus, subtiliter fere subaspere punctulatis, postice conjunctim late emarginatis, angulis externis retrorsum productis; abdomine minus subtiliter minus crebre punctulato, segmentis ad apicem setis elongatis instructis. Long.,  $1\frac{1}{3}$ — $1\frac{1}{2}$  l.; lat.,  $\frac{2}{5}$  l.

N. Queensland; taken by Mr. Koebele in the Barron River District.

#### QUEDIUS.

*Q. Koebelei*, sp. nov. Minus gracilis; sat nitidus; niger, iridescens, ore palpis antennis pedibusque testaceis, elytris obscure ferrugineis apicem versus infuscatis; antennis sat brevibus sat robustis, articulo 3<sup>o</sup> quam 2<sup>us</sup> manifeste longiori 4<sup>o</sup> 5<sup>o</sup> que subæqualibus quam 3<sup>us</sup> paullo brevioribus, 6<sup>o</sup>—10<sup>o</sup> inter se sat æqualibus quam latioribus vix longioribus quam 5<sup>us</sup> manifeste brevioribus; capite fere transverso, quam prothorax paullo angustiori, puncturis 3 utrinque prope oculum et foveis magnis 2 (his transversim positis) inter antennarum

bases impresso; prothorace modice transverso, antice sat angustato, in disco puncturis 2 interse transversim approximatis ante medium (2que inter se late distantibus in margine antico) positis et utrinque marginem medium versus puncturis 2 transversim positis impresso; scutello elytris abdomineque minus tortiter minus crebre punctulatis; elytris prothoraci longitudine æqualibus. Long., 2 l (vix); lat.,  $\frac{1}{2}$  l.

This small species seems to be quite distinct from all the Australian *Quedii* hitherto described. In M. Fauvel's tabulation of *Quedii* (Ann. Genov. 1878, pp. 551-2) it would be placed I think beside *metallicus*, Fauv., from which *inter alia* its diminutive size readily distinguishes it. I must say, however, that M. Fauvel's tabulation is so complicated (being designed for interpolation with another tabulation) that I do not feel sure I understand it accurately. However, all previously described species except *piceolus*, Fauv., are markedly larger than the present insect, and *piceolus* differs from it *inter alia* by the apical portion of its abdomen being red.

N. Queensland; presented to me by Mr. Koebele.

#### METOPONCUS.

*M. cairnsensis*, sp. nov. Sat elongatus; nitidus; niger, antennis piceo-ferrugineis, elytris læte violaceis, pedibus et abdominis segmentis 1° 4° que læte rufis; capite elongato parallelo, quam prothorax sublatori; hoc elongato, disco utrinque 4-punctulato; elytris biserialim obsolete punctulatis, prothoraci longitudine sat æqualibus. Long.,  $2\frac{1}{2}$  l.

Readily distinguishable by its coloring from all the previously described species.

N. Queensland; taken by Mr. Koebele near Cairns.

#### PALAMINUS.

*P. Novæ-Guineæ*, Fauv. Mr. Koebele has sent to me from the Barron River district of Queensland some examples of a *Palaminus* which agrees very well with the description of this species. It is quite possible that a comparison with the type might reveal distinctions, but at any rate the two must be extremely close. The present insect does not appear to be the allied *P. Australiæ*, Fauv., of which I believe I have an example (taken in *Victoria*) differing from the Queensland specimens by the characters that M. Fauvel specifies as distinguishing *P. Australiæ* from *P. Novæ-Guineæ*.

*P. vitiensis*, Fauv. Among the *Staphylinidæ* taken in N. Queensland by Mr. Koebele I find an example of a *Palaminus* agreeing well with the description of this well-marked Polynesian insect. The only discrepancy is a slight one in respect of color;



whereas in *P. vitiensis* the "apex" of the elytra should be infuscate, in this specimen the infuscation is slightly in front of the apex, leaving the extreme apex of a pallid color.

PHALACRIDÆ.

In the Ann. Soc. Ent. Fr. 1893-4 occurs an important memoir in which M. Guillebeau revises this family and enumerates a number of new genera and species including several from Australia. The author distributes the family into ten sub-families. I regret that I have been unable to arrive at any very certain conclusions as to the identification of the various sub-families and genera. As regards the sub families, some of them appear to be distinguished *inter se* by very slight characters; the *Olibromorphini* for instance are expressly stated to agree with the *Olibrini* in everything except in the metasternal process being shorter so as not to protrude beyond the intermediate coxæ. As regards the genera they are not recognisable with absolute certainty, no diagnosis being published and there being no indication of the characters beyond the few that the author makes use of in a tabulation of genera which he supplies. This tabulation, of course, only enables one to identify the genera on the assumption (a very large one) that all the species one is examining are referable to the genera named in M. Guillebeau's table.

I have before me a considerable collection of *Phalacridæ* gathered by Mr. Koebele and placed in my hands for identification. Owing to the very scanty characters attributed to Mr. Guillebeau's genera I am unable to refer any of the above mentioned specimens with certainty to any of those genera—but on the other hand there are none of those specimens which I can say with certainty do *not* belong to his genera. Under these circumstances the only possible course for me in describing Mr. Koebele's new species is to furnish a table of the genera which M. Guillebeau attributes to Australia arranged by his characters and apply to the species provisionally the names which that author employs, pointing out nevertheless that by this course I probably include under some of his names species which, if he had them before him, he would regard as requiring new generic names. The species described below, then, are divided into genera according to the following scheme, with the one exception indicated further on. I must remark however that the species which I refer to M. Guillebeau's sub-family *Olibromorphini* have the metasternum according to my observation protruding slightly beyond the intermediate coxæ, though not nearly so much protruding as the metasternum of those species which I refer to his *Olibrini*. I am disposed to think that this discrepancy is only a slight difference between his observation and mine because the species which have the metasternum short agree more or less

(some of them exactly) with the important tarsal characters that he indicates and because moreover if M. Guillebeau's description of the metasternum be held as rigidly accurate I should have to consider that I have not seen one of the *Olibromorphini* among all the numerous Australian *Phalacridæ* before me.

I cannot bring myself to think M. Guillebeau right in his treatment of *Litochrus*; I notice however an obscurity in his remarks which suggests the possibility of a printer's error. In his tabulation he distinguishes *Litochrus* from his new genus *Micromerus* by the former having the first joint of the posterior tarsi "very elongated," while the latter has it "two or three times as long as the second joint." Then he adds a note that in *Micromerus* the legs are probably less slender and the first joint of the tarsi less elongated than in *Litochrus* (which apparently he has not seen). But Erichson in characterising *Litochrus* merely says that the basal joint is longer than the second, and Lacordaire calls the second joint "a little" shorter than the first. This is a tangle which suggests the question whether in M. Guillebeau's note (quoted above) "less" may have been accidentally substituted for "more." I have in my collection an example from Tasmania which I have no doubt is *Litochrus brunneus*, Fr., and its hind tarsi have their basal joint less than twice as long as their second joint. I have also some species from tropical Australia in which the basal joint is even more than three times as long as the second. It would not however be safe either to call these latter *Micromerus* or to give them a new name; consequently I must apply the name *Litochrus* to all the Australian *Olibrini* known to me.

- A. Mesosternum visible only with the appearance of being a narrow scarcely prominent front margin to the metasternal lobe.
- B. Epistoma emarginate close to the eye.
- C. Metasternal lobe protruding beyond the intermediate coxæ (*Olibrini*).
- D. Basal joint of posterior tarsi very elongate ... *Litochrus*
- DD. Basal joint of posterior tarsi less elongate, but considerably longer than second joint ... *Micromerus*
- CC. Metasternal lobe less produced (according to M. Guillebeau not passing the intermediate coxæ) (*Olibromorphini*).
- D. Second joint of posterior tarsi much longer than basal joint... .. *Parasemus*
- (The other genera are not known to be Australian).
- BB. Epistoma not emarginate (*Phalacrini*).
- C. Elytra with a subsutural stria ... .. *Phalacrus*
- (No other genus recorded in Australia).
- AA. Mesosternum well developed (*Eustilbini*).
- B. Apical joint of maxillary palpi not dilated; basal joint of hind tarsi not elongate ... .. *Phalacrinus*
- (No other genus recorded as Australian).

## LITOCRUS.

As explained above, I am obliged to refer to *Litochrus* provisionally, all the Australian species known to me presenting the characters of the group that M. Guillebeau has called "*Olibrini*." Nevertheless three of them (the first three described below) might with some reason be separated generically from the rest on account of the great slenderness of their hind tarsi, the great elongation of the basal joint of the same, and the greater projection beyond the intermediate coxæ of their metasternal lobe; the basal joint of their hind tarsi is longer than all the other joints together. None of the species previously described by me as *Litochri* exhibit these characters, but two of them (*L. suturellus* and *lateralis*) appear as noted below to fall into M. Guillebeau's new genus *Parasemus*.

*L. coloratus*, sp. nov. Ovalis; nitidus; rufus, prothoracis basa (anguste) elytris (apice sanguineo excepto) nigris; supri fere lævi (elytrorum stria suturali antice abbreviata excepta); metasterno medio sparsim setoso; tarsorum posticorum articulo basali quam ceteri conjuncti longiori. Long.,  $1\frac{3}{10}$  l.; lat.,  $\frac{7}{10}$  l.

The conspicuous coloring of this pretty species renders it easily recognisable. It is all but devoid of sculpture even near the apex (the sutural stria excepted). There are however some faint transverse scratches on the elytra visible only from certain points of view.

N. Queensland; taken by Mr. Koebele near Cairns.

*L. pulchellus*, sp. nov. Ovalis; nitidus; supra rufus, capite postice prothoraceque (lateribus exceptis) obscuris, elytris (lateribus anguste apice late et macula communi magna transversa rufis exceptis) nigris; capite prothoraceque sat lævibus; elytris fere lævibus (stria suturali antice abbreviata excepta) sed apicem versus obsolete punctulato-striatis; corpore subtus late brunneo; metasterno medio rufo, sparsim punctulato, vix manifeste setoso (? exempli typici abraso); tarsorum posticorum articulo basali quam ceteri conjuncti longiori. Long.,  $1\frac{9}{10}$ — $1\frac{2}{5}$  l.; lat.,  $\frac{1}{2}$ — $\frac{3}{5}$  l.

The conspicuous elytral markings render this also a readily recognisable species. The elytra may be thus described:—Red, bearing a large common black ring which touches the base, nearly touches the lateral margins and is considerably separated from the apex. The enclosed central space (owing to irregularity in the shape of the black ring) presents the appearance of two roundish spots confluent for some distance along the suture. The elytra are not marked with transverse scratches.

N. Queensland; taken by Mr. Koebele near Cairns.

*L. noteroides*, sp. nov. Ovalis; nitidissimus; totus pallide brunneo-testaceus; supra fere lævis, elytrorum stria suturali leviter impressa antice abbreviata; tarsorum posticorum articulo basali quam ceteri conjuncti longiori. Long., 1 l.; lat.,  $\frac{3}{5}$  l.

This species bears a certain resemblance in outline to a *Dytiscid* of the genus *Noterus*. It is smaller than *L. coloratus* and very different in color from both the preceding species. Its elytra show no trace of the transverse scratches that are characteristic of *L. coloratus*.

N. Queensland; taken by Mr. Koebele near Cairns.

*L. Koebelei*, sp. nov. Sat late ovalis; nitidus; testaceus; capite prothoraceque fere lævibus; elytris sat distincte punctulato-striatis, striis basin versus obsolete et vix perspicue punctulatis, interstitiis subalutaceis et puncturis sparsissimis impressis stria suturali postice sat fortiter impressa; antennarum clava sat brevi sat lata. Long., 1 l. (vix); lat.,  $\frac{3}{5}$  l.

The uniform testaceous color, rather broad form, compact antennal club and distinct elytral sculpture of this species combine to render it easily recognisable.

N.S. Wales; taken by Mr. Koebele on the Blue Mountains.

*L. tinctus*, sp. nov. Ovalis; nitidus; testaceus, elytris basin versus indeterminate lineis macularibus fuscis notatis; capite prothoraceque subtilissime crebre sat distincte punctulatis; elytris ut prothorax punctulatis et puncturis paullo majoribus (his obsolete seriatim impressis et basin versus vix perspicuis) impressis, stria suturali postice minus fortiter impressa; antennarum clava sat brevi sat lata. Long.,  $1\frac{1}{10}$  —  $1\frac{1}{2}$  l.; lat.,  $\frac{7}{10}$  —  $\frac{9}{10}$  l.

This species seems to be near *Micromerus amabilis*, Guilleb., but is considerably larger and also differs *inter alia* by the line-like fuscous marks with which the basal part of the elytra is variegated. These marks seem to be always present though varying somewhat in intensity and never very sharply defined.

N. Queensland; taken by Mr. Koebele near Cairns.

*L. major*, Blackb. Ovalis; nitidus; niger subiridescens, capite antice prothoracis marginibus omnibus elytrorum lateribus (anguste) corpore subtus antennis palpis pedibusque testaceo-rufis; capite prothoraceque crebre subtiliter punctulatis; elytris seriatim subfortiter punctulatis, interstitiis dupliciter (sc. sparsius subtiliter et sparsissime subfortiter) punctulatis, stria suturali minus fortiter impressa; antennarum clava modica; hujus articulo basali leviter 2° sat fortiter transversis, apicali quam præcedens parum longiori. Long.,  $1\frac{2}{5}$  l.; lat.,  $1\frac{1}{10}$  l.

This species is notable for its large size. Its coloring also distinguishes it from all its Australian allies. I originally mentioned it as possibly a variety of the species I described as *Litochrus lateralis*, but it has good structural characters as will be seen by reference to my remarks on that species.

S. Australia.

The genus *Litochrus* (to which for reasons specified above I refer all the Australian *Phalacridæ* known to me having the hind tarsi elongated in proportion to the anterior tarsi and their basal joint considerably longer than the second joint) is now becoming so numerous that a tabular statement of the characters of its species seems called for.

- |     |  |                              |
|-----|--|------------------------------|
| A.  | Basal joint of hind tarsi longer than all the other joints together.                                 |                              |
| B.  | Elytra without transverse sculpture.   |                              |
| C.  | Color entirely testaceous ... ..   | <i>noteroides</i> , Blackb.  |
| CC. | Elytra with well-defined markings ...  | <i>pulchellus</i> , Blackb.  |
| BB. | Elytra with transverse scratch-like sculpture  | <i>coloratus</i> , Blackb.   |
| AA. | Basal joint of hind tarsi shorter than all the other joints together.                                |                              |
| B.  | Elytra with defined markings.  |                              |
| C.  | Elytra black with a common red spot ...  | <i>maculatus</i> , Blackb.   |
| CC. | Elytra pale testaceous with black markings.  |                              |
| D.  | Elytra with decided traces of numerous striae ... ..   | <i>laticulus</i> , Blackb.   |
| DD. | Elytra with only the sutural stria distinct ... ..   | <i>consors</i> , Blackb.     |
| BB. | Elytra without defined markings.   |                              |
| C.  | The largest punctures of the elytra are on alternate interstices ... ..                              | <i>alternans</i> , Blackb.   |
| CC. | Elytral puncturation not as "C."   |                              |
| D.  | The elytral sculpture consists of rows of punctures,—not distinct striae (except the sutural stria). |                              |
| E.  | These rows are almost entire and consist of strong punctures ... ..                                  | <i>major</i> , Blackb.       |
| EE. | The rows fail in the anterior quarter of the elytra.   |                              |
| F.  | The punctures in the rows, though fine, are strongly impressed (especially behind the middle)... ..  | <i>brunneus</i> , Er.        |
| FF. | The punctures in the rows very faintly impressed throughout.   |                              |
| G.  | Elytra piceous or reddish.   |                              |
| H.  | Antennæ entirely testaceous ...  | <i>sydneyensis</i> , Blackb. |
| HH. | Antennæ with their club dark   | <i>frigidus</i> , Blackb.    |
| GG. | Elytra testaceous.   |                              |
| H.  | Form oval (elytra with indistinct short fuscous lines) ... ..  | <i>tinctus</i> , Blackb.     |
| HH. | Form subhemispheric (Micromerus) ... ..  | <i>amabilis</i> , Guilleb.   |
| DD. | Elytral sculpture not consisting of mere rows of punctures.  |                              |
| E.  | Elytra with distinct punctulate striae   | <i>Koebeleri</i> , Blackb.   |
| EE. | Elytra with faint impunctulate striae  | <i>Palmerstoni</i> , Blackb. |



## PARASEMUS.

To the best of my knowledge no formal diagnosis of this genus has been published. The following characters are to be inferred from its place in two tabulations (Ann. Soc. Ent. Fr. 1894):—Palpi of ordinary length, intermediate coxæ widely separated, mesosternum appearing only as the reflexed margin of the metasternal lobe, clypeus emarginate close to the eye and rounded at the apex, metasternal lobe not passing the intermediate coxæ, prosternal lobe not passing the front coxæ, antennal club three-jointed, second joint of posterior tarsi two or three times as long as basal joint, apical joint of maxillary palpi cylindrical, a single subsutural stria, basal two joints of posterior tarsi not soldered together, posterior tibiæ obliquely truncate at the apex, form subhemispheric.

I have in my collection a number of species which must either be referred to this genus or be regarded as representing a new genus closely allied to it. They all agree more or less perfectly with the diagnosis of *Parasemus* that I have given above, their variations from it being in respect of characters that need not be regarded as generic; thus the basal joint of the hind tarsi is in every instance notably shorter than, though in some instances it is more than *half* as long as, the second joint; and the form of the body is by no means constantly subhemispheric, but this latter character (*i.e.*, the form of the body) is I think manifestly only specific. The character that I feel most doubtful about is "basal two joints of hind tarsi not soldered together." I am not sure that I understand this expression. In the insects before me the basal two joints are very closely connected and the suture (though perfectly manifest under a microscope) is very fine, but the two joints are certainly distinct from each other. A remarkable character common in a greater or less degree to them all consists in the compression and dilatation of the femora—especially the four anterior ones. These four might be called "subcircular" being almost as wide as long, the hinder margin of the intermediate being however not evenly rounded but feebly angular in the middle; in repose the tibiæ are almost hidden under these flat plate-like femora only their apex protruding. As M. Guillebeau does not refer to the femora in *Parasemus* this character does not help me to determine whether my specimens are *Parasemi*.

I find that two species which I have previously referred to *Litochrus* must take their place among these present insects, *viz.*, *L. suturellus*, Blackb., and *L. lateralis*, Blackb. At the time I described them the suture between the basal two joints of the hind tarsi escaped my notice and I mistook the two joints for a single one. I have now placed a hind tarsus of all the species in

my collection under a microscope so as to make sure of correctly ascertaining the structure. The two species which I described (Tr. Roy. Soc. S.A. 1892, p. 98) as probably members of a new genus near *Litochrus* and which I called *L. (?) alpicola* and *L. (?) uniformis* must also stand here and I think that which I called *Olibrus victoriensis* should be added.

*P. torridus*, sp. nov. Late ovalis; nitidus; supra piceus plus minusve rufescens; subtus, cum antennis palpis pedibusque, brunneo-testaceus; capite prothoraceque fere lævibus, elytris parte prope basin lævi excepta seriatim distincte punctulatis, puncturis in seriebus subtilibus et crebre dispositis, stria suturali (hac pone elytrorum medium incipienti) bene impressa, interstitiis vix manifeste punctulatis; antennarum clava sat elongata; hujus articulis 1° 2° que sat transversis intus quam extus multo magis dilatatis, articulo apicali quam præcedentes 2 conjuncti vix breviori. Long., 1 l.; lat.,  $\frac{4}{5}$  l.

This species bears considerable resemblance to *P. (Litochrus) suturellus*, Blackb., from which it differs *inter alia* by the large basal space devoid of sculpture on the elytra and by the sutural stria being altogether effaced on more than the anterior half of the elytra; also by the interstices of the elytral striæ being almost impunctulate, only the one or two nearest to the suture bearing any defined punctures.

N. Queensland; taken by Mr. Koebele near Cairns.

*P. discoideus*, sp. nov. Late ovalis; nitidus; supra rufo-piceus, prothoracis lateribus et elytrorum macula magna communi indeterminata basin attingenti multo dilutioribus; subtus cum antennis palpis pedibusque brunneo-testaceus; capite prothorace que fere lævibus, elytris (parte magna prope basin lævi excepta) seriatim distincte punctulatis, puncturis in seriebus subtilibus sat sparsim dispositis, stria suturali (hac pone elytrorum medium incipienti) sat bene impressa, interstitiis vix manifeste punctulatis; antennarum clava sat elongata; hujus articulis ut præcedentis. Long.,  $\frac{4}{5}$  l.; lat.,  $\frac{3}{5}$  l.

Smaller than the preceding and differently colored, also with the punctures in the elytral series a little finer and considerably less closely placed; the elytra are of a dark red or piceous color, the whole disc being occupied by a common somewhat heart-shaped blotch of a testaceous red color; this blotch is not sharply defined, touches the base, extends to within a short distance of the apex and spreads out laterally so as to be separated from the margin on either side by a dark space equal to about one-third of the width of an elytron. In certain lights the elytra of this

species show a rather distinct blue iridescence which is scarcely discernible in *P. torridus*.

N. Queensland; taken by Mr. Koebele near Cairns.

*P. doctus*, sp. nov. Sat late ovalis; sat nitidus; capite prothoraceque rufis (hujus disco infuscato); elytris piceo-nigris, margine laterali (anguste) et macula communi discoidali bene determinata litteram V (late apertam) simulanti rufis; corpore subtus antennis palpis pedibusque sordide testaceis; capite prothoraceque sparsim sat distincte punctulatis; elytris (parte angusta prope basin lævi excepta) seriatim distincte punctulatis, puncturis in seriebus sat subtilibus sat crebre dispositis, stria suturali (hac longe ante elytrorum medium incipienti) sat fortiter impressa, interstitiis confertim subtilissime punctulatis; antennarum clava ut *P. torridi*. Long.,  $1\frac{1}{10}$  l.; lat.,  $\frac{4}{5}$  l.

This species is easily recognisable by the sharply defined red mark resembling a widely open V on the disc of the almost black elytra.

N.S. Wales; taken by Mr. Koebele on the Blue Mountains.

*P. comes*, sp. nov. Late ovalis; nitidus; supra piceo-niger, capite prothoracis lateribus elytrorum lateribus (anguste) et macula magna communi discoidali cordiformi bene determinata (hac marginem nusquam attingenti) rufis; subtus cum antennis palpis pedibusque testaceus vel brunneo-testaceus, metasterno medio sanguineo; capite prothoraceque sparsim sat distincte punctulatis; elytris seriatim distincte (prope basin vix perspicue) punctulatis, puncturis in seriebus sat subtilibus sat crebre dispositis, stria suturali paullo ante medium incipienti minus fortiter impressa, interstitiis sat distincte punctulatis; antennarum clava ut *P. torridi*. Long.,  $1\frac{3}{10}$  l.; lat., 1 l.

Resembles the preceding but apparently a good species; it differs chiefly by its larger size, broader build, and the fainter impression of the sutural stria which commences evidently further from the suture; also the red mark on its elytra is of very different form. Resembles also in general appearance *Litochrus maculatus*, Blackb.

N. Queensland; taken by Mr. Koebele near Cairns.

*P. modestus*, sp. nov. Late ovalis, postice subacuminatus; nitidus; totus brunneo-testaceus; capite prothoraceque fere lævibus, elytris (parte magna prope basin lævi excepta) seriatim distincte punctulatis, pone scutellum subgibbosis, puncturis in seriebus sat subtilibus minus crebre dispositis, stria suturali paullo ante medium incipienti sat fortiter impressa, interstitiis (illis versus suturam exceptis) vix per-

spicue punctulatis; antennarum clara ut *P. torridi*. Long.,  $\frac{4}{5}$  l.; lat.,  $\frac{2}{5}$  l.

Easily distinguishable by its entirely uniform pale brownish-testaceous color and extremely nitid appearance.

N. Queensland; taken by Mr. Koebele near Cairns.

*P. obsoletus*, sp. nov. Minus late ovalis; nitidus; supra fuscopiceus (nonnullorum exemplorum lateribus dilutioribus); subtus cum antennis palpis pedibusque brunneo-testaceus; capite prothoraceque vix perspicue punctulatis; elytris (parte magna prope basin levi excepta) seriatim distincte punctulatis, pone scutellum subgibbosis; puncturis in seriebus subtilibus minus crebre dispositis, stria suturali paullo ante medium incipienti sat fortiter impressa, interstitiis vix perspicue punctulatis; antennarum clava ut *P. torridi*. Long.,  $\frac{4}{5}$  l.; lat.,  $\frac{1}{2}$  l.

This species is much like the preceding, apart from its very different color,—but when carefully examined its form is seen to be less broadly oval, the puncturation of its elytra considerably finer and its femora much less broadly dilated.

N. Queensland; taken by Mr. Koebele near Cairns.

*P. internatus*, sp. nov. Sat late ovalis; nitidus; supra piceoniger, prothoracis lateribus obscure rufescentibus, subtus cum antennis palpis pedibusque rufo-testaceis; capite prothoraceque crebre subtilissime (vix perspicue) punctulatis, elytris (parte sat magna prope basin sublævi excepta) seriatim minus distincte punctulatis, puncturis in seriebus subtilissimis sat crebre dispositis, stria suturali sat longe ante medium incipienti, minus fortiter impressa, interstitiis subtiliter alutaceis; antennarum clava ut *P. torridi*. Long.,  $\frac{9}{10}$  l.; lat.,  $\frac{3}{5}$  l.

A species of very dark color on the upper surface, with the punctures in the elytral series excessively fine and faintly impressed. It is closely allied to the two preceding and best distinguished, I think, by inspecting it from the side, when the outline curve of its upper surface is seen to be much less curved (*i.e.*, part of a much larger circle) and to be *even*, whereas in the other two there is an evident unevenness of the curve due to a slight gibbosity a little distance behind the scutellum, the height of the elytra at that point being much greater than at the middle of their length.

S. Australia; Petersburg.

The following table shows the distinctive characters of the described Australian *Parasemi*. In this genus, it will be remembered, I include all the Australian *Phalacride* known to me having the characters of the *Olibromorphini* (as they are stated

above) and also having the second joint of the hind tarsi considerably longer than the basal joint.

A. Elytra without sharply defined markings.

B. Form oval.

C. Discoidal interstices of elytra with very inconspicuous (if any) puncturation.

D. Sutural stria extending well into the front half of the elytra.

E. The punctures in the elytral series more or less closely placed.

F. Color of the upper surface more or less piceous or reddish-piceous.

G. The elytral rows of punctures very fine throughout, and scarcely traceable in basal one-fifth of elytra.

H. Elytra sub-gibbous behind the scutellum ... ..

*obsoletus*, Blackb.

HH. Elytra not sub-gibbous behind the scutellum ... ..

*internatus*, Blackb.

GG. The elytral rows of punctures much stronger (almost as in the European *Phalacrus caricis*, Sturm) and continued nearer base ...

*suturellus*, Blackb.

FF. Color uniformly very pale testaceous

*modestus*, Blackb.

EE. The punctures in the elytral series very fine and much more sparsely placed

*discoideus*, Blackb.

DD. Sutural stria scarcely reaching into the front half of the elytra ... ..

*torridus*, Blackb.

CC. Discoidal interstices of elytra with sparse well-defined puncturation about as strong as in the European *Phalacrus caricis*, Sturm.

D. Elytra black ... ..

*lateralis*, Blackb.

DD. Elytra red ... ..

*victoriensis*, Blackb.

BB. Form subhemispheric.

C. General color black ... ..

*Grovellei*, Guillb.

CC. General color ferruginous ... ..

*uniformis*, Blackb.

BBB. Elytra very broad at the shoulders and strongly acuminate behind ... ..

*Alpicola*, Blackb.

AA. Elytra with sharply defined marking.

B. The marking consists of a common heart-shaped spot ... ..

*comes*, Blackb.

BB. The marking resembles the letter V ... ..

*doctus*, Blackb.

#### PHALACRINUS.

*P. notabilis*, sp. nov. Subrotundus, postice sat acuminatus; nitidus; supra piceo-niger, capite antice rufescenti, prothoracis (late) et elytrorum (anguste) lateribus rufis; corpore subtus antennis palpis pedibusque brunneo-testaceis, antennarum clava infuscata; capite prothoraceque subtilissime minus confertim punctulatis; elytris punctulato-striatis, striis suturam versus subtiliter latera versus fortiter impressis interstitiis distincte subtiliter nec crebre punctulatis; antennarum articulo basali valde dilatato, articulo



10° quam 9<sup>us</sup> sat breviori, apicali quam præcedentes 2 conjuncti vix breviori.

Var. ? *dilutior*. Pallide brunneo-testaceus, elytris apicem versus picescentibus. Long.,  $1\frac{1}{10}$  l.; lat., 1 l.

Resembles *P. obtusus*, Blackb., in shape, but differs from it and from the other previously described species *inter alia* by the very deeply impressed lateral striæ of its elytra.

N. Queensland; taken by Mr. Koebele near Cairns.

*P. comis*, sp. nov. Subrotundus, postice sat acuminatus; nitidus; brunneo-testaceus, hic illic indeterminate obscurior; capite prothoraceque subtilissime sat sparsim punctulatis; elytris distincte subtiliter striatis, striis suturam versus subtiliter latera versus multo minus subtiliter punctulatis, interstitiis distincte minus crebre punctulatis; antennarum articulo basali sat dilatato, apicali quam præcedentes 2 conjuncti sat breviori. Long.,  $1\frac{1}{10}$  l. (vix); lat.,  $\frac{9}{10}$  l.

Resembles *P. obtusus*, Blackb., in shape and elytral striation but differs in the very well defined puncturation of its elytral striæ. *P. rotundus*, Blackb., has punctulate striæ but its striæ (especially the lateral ones) are very much more *finely* punctured and its shape is very different, being shorter and evidently more nearly circular.

Victoria; sent to me by Mr. French.

## PECTINICORNES.

### CERATOGNATHUS.

*C. Gilesi*, sp. nov. (Mas.) Elongatus, sat parallelus; crasse rugulose (in prothorace inæqualiter) punctulatis; niger, squamis adpressis aurantiacis sparsim vestitus; capite supra tuberculo mediano (hoc ad apicem vix bifido) instructo; mandibulis quam caput vix longioribus, in medio obtuse leviter auriculatis, ad apicem trifidis (lobo intermedio quam ceteri longiori); prothorace quam longiori fere dimidia parte latiori, antice sat angustato, longitudinaliter profunde sulcato; elytris irregulariter costatis, costis alternis quam ceteræ majoribus.

Feminae mandibulis brevibus nec auriculatis. Long. (mands. incl.), 6—6 $\frac{1}{4}$  l.

A very distinct species. Compared with *C. niger*, Westw., it differs by the form of the mandibles which are trifid at the apex (the three lobes all pointing in a direction continuing the length of the mandible) and in the male have a small obtuse elevation about the middle of their length (this elevation is much smaller and further from the base than the elevation on the mandibles of *C. Frogatti*, Blackb.); also differs from *C. niger* by its coarser

and less evenly distributed sculpture which is so disposed on the prothorax as to leave some large nitid protuberant spaces devoid of punctures, also by its prothorax being much less strongly transverse and being very evidently narrowed in front, also by there being only one frontal tubercle and the prothorax being deeply channelled down the middle, also by the elytra having about ten costæ, of which the alternate ones are the stronger (the somewhat coarse puncturation of the elytra not being interrupted by the costæ these latter are less conspicuous than they would be otherwise). The totally different sculpture of the prothorax *inter alia* distinguishes this species from *C. Westwoodi*, Thoms.

Victoria ; in mountainous parts ; taken by Mr. E. Giles.

### CRYPTOPHAGIDÆ.

#### TELMATOPHILUS.

The following four species, although not very closely allied *as* species, seem to present no structural differences inconsistent with their being placed together generically. They are all subpentamerous clavicorns, and my own inclination was to refer them or at any rate most of them to the *Erotylidæ*. Feeling, however, some hesitation as to their true place I forwarded examples of the first described to my friend Dr. Sharp, of Cambridge, to whose obliging readiness in giving me his judgment I was already under many obligations. Dr. Sharp tells me that the specimens I submitted to him may certainly be treated as congeneric with the N. Zealand *Telmatophilus nitens*, Shp. He, however, points out that in this determination he does not differ much from my view of the matter as he regards the *Erotylidæ* and *Cryptophagidæ* as incapable of satisfactory distinction. There is no higher authority than Dr. Sharp, as all Coleopterists know ; I consider myself very fortunate in having been able to obtain his opinion.

*T. Sharpi*, sp. nov. Oblongus ; modice convexus ; nitidus ; setis subtilibus singulis minus elongatis e puncturis singulis orientibus vestitus ; rufo-testaceus, capite prothorace et elytrorum plagis sat magnis nonnullis plus minusve infuscatis, exemplorum nonnullorum antennarum clava paullo infuscata ; capite convexo sat æquali, cum prothorace sat fortiter vix crebre punctulato ; hoc sat fortiter tranverso, antice vix angustato, ad basin late sublobato, ante basin transversim fortiter sulcato, lateribus sat arcuatis ante basin manifeste sinuatis, angulis posticis acute rectis ; elytris leviter (striis lateralibus fortiter impressis exceptis) striatis, seriatim punctulatis, puncturis in striis crebris, interstitiis

lævibus ( $3^{\circ}$   $5^{\circ}$   $7^{\circ}$  que sparsim seriatim punctulatis exceptis) antennis quam corporis dimidium brevioribus, articulo basali suborbiculari,  $2^{\circ}$  multo minori moniliformi,  $3^{\circ}$  quam  $2^{\text{us}}$  sat longiori,  $4^{\circ}$  ut  $2^{\text{us}}$ ,  $5^{\circ}$  paullo longiori,  $6^{\circ}$ — $8^{\circ}$  ut  $2^{\text{us}}$ ,  $9^{\circ}$   $10^{\circ}$  que transversis sat latis,  $11^{\circ}$  quam  $10^{\text{us}}$  paullo longiori obovato; prosterno inter coxas sat lato utrinque carinato, postice producto, ad apicem truncato; oculis prominulis fortiter granulatis; metasterno ad latera grosse (in medio cum abdomine magis subtiliter) punctulato. Long.,  $1\frac{1}{5}$  l.; lat.,  $\frac{2}{5}$  l.

The infuscate blotches on the elytra are variable; in a well-marked specimen they consist of a large transversely quadrate or somewhat triangular common blotch at the base, a broad more or less straight median fascia and a large common apical blotch. In some examples the median fascia is dilated forward near the lateral margin, in others the median fascia is interrupted at the suture, and in others it does not reach the lateral margins. In some examples the dark markings on the elytra are nearly black and in others very little darker than the rest of the surface. The elytra of very dark examples are nearly black with a narrow pale fascia from either shoulder obliquely running towards the suture, and a pale spot on each elytron near the apex.

N. Queensland; taken by Mr. Koebele near Cairns.

*T. Koebelei*, sp. nov. Præcedenti (*T. Sharpi*) valde affinis; antennarum articulo  $5^{\circ}$  quam  $4^{\text{us}}$   $6^{\text{us}}$  que haud perspicue longiori; prothoracis lateribus manifeste minus arcuatis; elytris (striis lateralibus exceptis) haud striatis, puncturis in seriebus multo minus crebre dispositis. Long.,  $1\frac{1}{5}$  l.; lat.,  $\frac{2}{5}$  l.

In addition to the structural characters set forth above this species differs from the preceding in the markings of its elytra, there being on each elytron a longitudinal prolongation of the median dark mark connecting the latter with the hind external corner of the basal blotch; this is not the case with any variety that I have seen of *T. Sharpi*.

Queensland; taken by Mr. Koebele.

*T. cairnsensis*, sp. nov. *T. Sharpi* valde affinis; prothorace antice nullo modo angustato, minus crebre punctulato, lateribus fere rectis, elytris ut *T. Koebelei*. Long.,  $1\frac{3}{10}$  l.; lat.,  $\frac{1}{2}$  l. (vix).

Larger and of slightly wider build than *T. Sharpi* and with a very differently shaped prothorax. The markings differ in the basal and apical blotches of the elytra being very small, but as I have only seen a single example of this insect it is possible that this may be a mere variation.

N. Queensland; taken by Mr. Koebele near Cairns.

*T. brevisformis*, sp. nov. *T. Sharpi* valde affinis; multo minus elongatus, magis crebre setulosus, antennarum articulo 5° quam 4<sup>us</sup> vix longiori, prothoracis lateribus paullo ante basin subangulatis hinc ad basin fortiter convergentibus, elytrorum interstitiis omnibus punctulatis. Long., 1 l.; lat.,  $\frac{2}{5}$  l.

f. The dark markings of this species are much like those of some specimens of *T. Sharpi*; they are however much reduced in size and intensity, so that each elytron is of a yellowish brown color with a dark patch about the scutellum an elongate longitudinal dark patch on the disc and a small apical dark patch. As each puncture on this, and all the preceding three, species bears a fine seta the interstices being much more punctulate involves the general surface being much more setulose.

N. Queensland; taken by Mr. Koebele.

*T. stygius*, sp. nov. Anguste oblongus; sat parallelus; sat convexus; nitidus; setis subtilibus minus perspicuis e puncturis singulis orientibus vestitus; supra niger; subtus piceus in medio rufescens; antennis pedibusque picescentibus, tarsis dilutioribus; capite prothoraceque fortiter vix crebre punctulatis; hoc sat transverso antice haud angustato, ad basin late sublobato, ante basin transversim fortiter sulcato, lateribus sat rectis; elytris vix (striis lateralibus exceptis) striatis, fortiter sat crebre seriatim punctulatis, interstitiis alternis sparsim vix perspicue punctulatis; antennis fere ut *T. Sharpi* sed articulo 5° quam 4<sup>us</sup> parum longiori; oculis et corpore subtus fere ut *T. Sharpi* sed metasterno medio et abdomine magis fortiter punctulatis. Long.,  $1\frac{1}{5}$  l.; lat.,  $\frac{2}{5}$  l. (vix).

Its black color and parallel build render this species easy to recognise.

N. Queensland; taken by Mr. Koebele.

*T. singularis*, sp. nov. Oblongus; sat convexus; sat nitidus; setis subtilibus e puncturis singulis orientibus vestitus; rufobrunneus, antennarum clava infuscata; capite prothoraceque fortiter vix crebre punctulatis; hoc transverso, quam elytra sat angustiori, antice parum angustato, ad basin haud lobato, ante basin vix perspicue transversim sulcato, lateribus sat rotundatis crenulatis; elytris leviter (latera versus magis fortiter) striatis, striis crebre fortiter (interstitiis sparsissime) punctulatis; antennis fere ut *T. Sharpi* sed paullo brevioribus, articulo 5° quam 4<sup>us</sup> vix longiori; corpore subtus fere ut *T. Sharpi*; oculis sat fortiter granulatis, sed quam *T. Sharpi* minus grosse. Long., 1 l.; lat.,  $\frac{2}{5}$  l.

Differing much from the preceding in facies (owing chiefly to its prothorax being narrower in comparison with the elytra and

being neither lobed nor strongly sulcate at the base), this species nevertheless seems less aberrant in *Telmatophilus* than they do, especially in respect of its less coarsely granulated eyes [these organs in the preceding are far more coarsely granulated than in European *Telmatophili* (e.g., *T. caricis*, Oliv.)] and its tarsi of which the basal three joints are (as in *T. caricis*) a little longer and less closely packed together than in *T. Sharpi*, &c. It may be noted that none of the above species can be placed in the Australian genus *Cnecosa* which Mr. Pascoe associated with *Telmatophilus*, and from which *inter alia* they differ widely in the structure of their palpi.

N. Queensland; taken by Mr. Koebele.

## LAMELLICORNES.

### EUPECILA.

*E. balteata*, Vollenh. I have received from Mr. French examples which seem to agree well with the description and figure of this species. Mr. French reports them as taken in N. Queensland. It should be noted that the present insect does not appertain to *Eupécila* as limited by Dr. Kraatz, but is I think clearly congeneric with *Schizorhina atripennis*, Macl., which Dr. Kraatz somewhat hesitatingly assigns to *Dilochrosis*.

## EUCNEMIDÆ.

### FORNAX.

*F. coloratus*, sp. nov. Sat nitidus; rufus, antennis (basi excepta) capite postice elytrisque (fascia lata postmediana excepta) nigris; pube brevi (hac in prothorace aurea in elytris nigra) densim vestitus; capite sat crebre (prothorace minus crebre, elytris sparsim) minus fortiter punctulatis; capite inter oculos subplanato in parte mediana leviter impresso, haud manifeste carinato; antennis quam prothorax longioribus, articulo 3° quam 2<sup>us</sup> plus quam duplo (quam 4<sup>us</sup> paullo) longiori; prothorace sat transverso, antice sat angustato, angulis posticis (superne visis) sat acutis, basi 4-impressa; elytris in partibus anticis duabus parum (apicem versus magis fortiter) angustatis, sat evidenter iridescentibus, vix manifeste (stria subsuturali excepta) striatis. Long., 6 l.; lat.,  $2\frac{1}{3}$  l.

Easily recognisable by its nitid, black, more or less iridescent elytra traversed immediately behind the middle by a broad testaceous red fascia. In M. de Bonvouloir's tabulation of *Fornax* [Ann. Soc. Ent. Fr. (4) X. part supp.] this fine species would find its place somewhere in the neighborhood of the Malayan *F. mirabilis*, Bonv., from which it differs *inter alia* by



its apical ventral segment not being acuminate and in the markings of its elytra.

N. Queensland; in the collection of Mr. French.

## CURCULIONIDÆ.

### CUBICORHYNCHUS.

*C. taurus*, sp. nov. Ovalis; postice abrupte declivis (fere perpendicularis); piceus, squamis fumicoloribus et aliis griseis intermixtis sat dense vestitus, capite confertim granulato, inter (sed fere pone) oculos granulis majoribus 2 instructo; rostro brevi crasso, cristis interocularibus subspiniformibus apice obtusis antrorsum plane directis insigni; prothorace modice transverso, sat crasse minus confertim granulato (vel fere tuberculato, granulis majoribus nonnullis latera versus in parte antica dispositis), linea subtili mediana impresso, lateribus sat æqualiter arcuatis, latitudine majori ante medium posita; elytris crasse nec profunde sulcato-foveatis, interstitiis angustis elevatis e granulis confertim positis formatis.

Maris tibiis posticis intus supra medium abrupte fortiter tumidis; metasterno postice et segmento ventrali basali sat profunde concavis; segmento ventrali apicali postice late rotundato.

Femina latet. Long. 5 l., lat.,  $2\frac{1}{3}$  l.

This species may be at once distinguished from its described congeners by the interocular crests (which usually resemble a prolongation hindward of the lateral margin of the rostrum) taking the form of short horn-like processes directed straight forward—*i.e.*, rising abruptly perpendicularly (but a little pointed outward) to the general surface. The setæ springing from the tubercles are of pale yellow color.

Lake Callabonna; taken by Mr. Zietz.

### CATOCALEPHE (gen. nov. *Aterpidarum*).

Corpus convexum subparallelum setosum; rostrum modice elongatum, latum, depressum, ante basin gibbum, antice et in medio nitidum subglabrum sublæve, in partibus ceteris opacum rugulosum setosum; scrobes postmedianæ, infra rostrum directæ, antrorsum ut sulci laterales ad rostri apicem continuæ; scapus brevis, oculum haud attingens; funiculus 7-articulatus brevis crassus (articulo 1° quam ceteri paullo longiori), in clava adnatus; oculi parvi depressi subgrosse granulati; prothorax magnus transversim quadratus (parte antica summa angustata), quam elytra vix angustior lobis ocularibus fortiter spiniformibus; scutellum parvum; prosternum ante coxas sat elongatum; metasternum sat elongatum; coxæ anticæ contiguæ; pedes sat breves sat

robustæ; femora mutica; tibiæ flexuosæ, ad apicem bicalcaratæ, anticis extus crenulatis, posterioribus 4 externe fortiter denticulatis, posticarum corbulis cavernosis; tarsi lineares, unguiculis liberis simplicibus; abdominis segmentum 2<sup>um</sup> quam 3<sup>um</sup> 4<sup>um</sup> que conjuncta longius.

The species on which I found this genus is at once recognisable by the remarkable spiniform development of the ocular lobes. What are its affinities is a very difficult question. In general appearance it is remarkably like *Orichora* (figured by Mr. Pascoe Journ. Linn. Soc. X. t. 19, f. 3) but has nothing to do with it structurally. My inclination would be to associate it in the *Rhyparosomidæ* with *Mandalotus* (probably identical as I have already pointed out with *Dysostines*), but its comparatively long metasternum seems quite irreconcilable with such a place. I have therefore referred it to the tribe in which a strict observance of M. Lacordaire's tabulations would locate it and have associated it with the *Aterpides*. Certainly its rostrum is considerably like that of a *Rhinaria*, but some of the characters cited above (e.g., the cavernous corbels of its hind tibiæ) are by no means suggestive of an *Aterpid*. Probably M. Lacordaire if it had been before him would have treated it as representing a distinct tribe. The peculiar scrobes of the rostrum call for special notice; a deep lateral sulcus runs from the apex of the rostrum hindward and somewhat behind the middle suddenly widens and is deflected to the under surface, the antennæ being inserted at the point of deflection.

*C. minans*, sp. nov. Convexa; sat parallela; sat brevis; picea, exemplorum nonnullorum pedibus elytrisque paullo rufescentibus; setis albidis subcrebre vestita; prothorace nitido, sat crebre sat fortiter nec rugulose (lateribus cum capite rugulose) punctulato, disco longitudinaliter anguste lævi subelevata; elytris minus nitidis, striatis, interstitiis sat crebre subgrosse granuloso-rugulosis; corpore subtus crebre squamoso-punctulato. Long. (rostr. incl.), 3—3 $\frac{2}{3}$  l.; lat., 1 $\frac{1}{5}$ —1 $\frac{2}{5}$  l.

Central Australia; taken by Mr. Zietz at Lake Callabonna.

#### PACHYURA.

*P. minima*, sp. nov. Suboblunga (postice latior); rufa, in parte vel tota picescens; supra squamis ochraceis vestita, his in capite prothoracque 3-lineatim in elytris 3-fasciatim minus perspicue condensatis; subtus dense æqualiter albidosquamosa (nihilominus in abdominis segmentis singulis,—apicali excepto,—utrinque macula parva denudata); rostro nigro nitido, usque ad antennarum basin squamoso et longitudinaliter carinato, fere lævi, ad apicem sat dilatato;

antennis præter prothoracis basin paullo attingentibus, articulo 3<sup>o</sup> quam 1<sup>us</sup> paullo longiori; prothorace cum elytris sat crebre granuloso-punctulato, transverso, antice angustato, lateribus leviter rotundatis; elytris obsolete striatis, ad apicem rotundatis, femoribus inermibus. Long. (rostr. incl.), 2—3 l.; lat.,  $\frac{3}{5}$ —1 (vix) l.

I cannot ascertain that this extremely common little species has ever been described. I have little doubt that it is the insect named *P. australis* (but not described) by Mr. Hope as the type of the genus *Pachyura* and that the insect which Schönherr described as *P. australis*, Hope, was wrongly identified; the latter I have not seen from S. Australia whereas this little species is plentiful in the localities from which Hope obtained most of his insects. *P. minima* is a variable insect, its derm (including the legs and antennæ) ranging in color from red to pitchy black and the squamosity (which is coarse and seta-like) from pale to bright ochraceous. The squamosity is vaguely and sparsely dispersed over the whole upper surface except the apical part of the rostrum and in places is denser than elsewhere, this condensation of scales causing the appearance of an ill-defined pattern which consists of three lines running hindward from the level of the eyes to the base of the prothorax and three elytral fasciæ (subbasal, median, and subapical). It is however only in well preserved specimens that the elytral fasciæ are all distinguishable; average specimens give the appearance of elytra somewhat evenly squamose except in there being a semi-denuded space before and behind the middle. The sexual differences are not very marked; the males however are smaller and less robust than the females, and the rostrum in the former sex is slightly shorter than (while in the latter it is as long as) the head. The small size of this species is in itself a sufficient character to distinguish it from others previously described.

S. Australia; Victoria; N.S. Wales.

## LONGICORNES.

### PACHYDISSUS.

*P. Frenchi*, sp. nov. Piceus; pube sericea læte argentea densa interrupte vestitus; prothorace ad latera obtuse tumido, supra crasse ruguloso; elytris ad apicem oblique truncatis, partis truncatæ angulis spiniformibus; oculis supra modice approximatis, subtus late distantibus; spatio inter oculos subtus capillis subtilibus elongatis dense vestito, sat crebre punctulato, carina obtusa insigni transversim arcuata instructo; antennarum articulo basali crasse nec profunde ruguloso.

Maris antennis quam corpus multo longioribus; articulo 1° valde dilatato prothorace nullo modo attingenti, 2° brevi, 3° clavato quam præcedentes 2 conjuncti parum longiori, 4° clavato quam 3<sup>us</sup> paullo breviori, 5° leviter clavato 3° longitudine sat æquali, 6° sat gracili filiformi quam 5<sup>us</sup> dimidio longiori, 7° 8° que quam 6<sup>us</sup> manifeste longioribus supra longitudinaliter carinatis, ceteris (exempli typici) carentibus; segmento ventrali apicali ad apicem rotundato-truncato. Long., 17 l.; lat.,  $4\frac{1}{5}$  l.

Feminae antennis quam corpus subbrevioribus filiformibus. Long., 16 l.

At once distinguishable from its described congeners by the beautiful bright silvery pubescence with which its upper surface is patchily clothed. It is also remarkable for the coarse but not very deep rugulosity of the basal joint of its antennæ which runs in transverse wrinkles. The underside of its head is like that of *P. picipennis*, Germ., except that the space between the eyes is divided from the space immediately in front of it (not by a sulcus but) by a curved carina.

N. Queensland.

#### NEOSTENUS.

*N. spinipennis*, sp. nov. (Mas.) Brunneo-piceus, antennis obscurioribus, elytris (marginibus anguste piceis exceptis) dilutioribus; antennis quam corpus paullo longioribus, articulis 5—10 quam *N. Saundersi* paullo magis fortiter serratis; prothorace quam longiori vix (quam *N. Saundersi* minus perspicue) latiori; elytris ad apicem suturalem spina valida (quam tarsorum articulus 3<sup>us</sup> vix breviori) armatis, ad latera profunde (quam *N. Saundersi* magis fortiter) excavatis, costis obsoletis (quam *N. Saundersi* multo minus distinctis). Long., 13 l.; lat.,  $3\frac{1}{5}$  l.

Very like *N. Saundersi*, Pasc., but easily distinguishable by the characters cited above, especially by the long stout spine at the sutural apex of the elytra.

Central Australia; taken by Mr. Zietz near Lake Callabonna.

#### PRAONETHA.

*P. bimaculata*, sp. nov. (Fem. ?) Fusca, dense fusco-pubescent, prothoracis maculis 2 magnis basalibus et elytrorum notula communi postmediana late V-formi piceis, spatio elytrorum inter suturam et costam ad suturam proximam in parte tertia postica longe testaceo-hirsuto; capite prothoraceque sat sparsim subtilius, elytris basin versus sparsim magis fortiter postice minus perspicue, punctulatis; prothorace antice et postice transversim impresso, modice transverso, supra minus inæquali haud tuberculato, lateribus sat arcuatis;

elytris postice haud abrupte declivibus, ad apicem oblique truncatis, in disco tricostatis (et quoque costa 4<sup>a</sup> exteriori leviter elevata, et 5<sup>a</sup> versus apicem fere ut tuberculus elongatus manifesta), costa ad suturam proxima (ita ut cristæ 3 fasciculatæ appareant) divisa, disco granulis nonnullis parvis ornato; segmento ventrali apicali in medio nigro, linea subtili longitudinali mediana impresso; antennis quam corpus paullo brevioribus. Long., 6 l.; lat.,  $2\frac{2}{5}$  l.

This species belongs to Mr. Pascoe's seventh section of *Praonetha* (Tr. Ent. Soc. Lond. [3] III., pp. 180, &c.). It seems to be very distinct from all previously described species; the long testaceous pilosity clothing the sutural region in its hinder portion is a notable character; this pilosity is particularly conspicuous at the commencement of the posterior declivity where it is laid almost flat and directed outward as though combed from the suture over the hindmost of the crests. [A specimen of this species recently received from Mr. Cowley and taken by him near Cairns is somewhat smaller than the type and has snowy-white pubescence clothing a common space on the elytra a little behind the scutellum.]

N. Queensland.

CAIRNSIA (gen. nov. *Niphonidarum*).

Mas. Mandibulæ modicæ; caput breve, inter antennis parum concavum; antennæ quam corpus paullo longiores, subtus sparsim ciliatæ, articulo basali modico sat anguste piriformi, 3<sup>o</sup> quam 1<sup>us</sup> duplo longiori, 4<sup>o</sup> quam 3<sup>us</sup> vix breviori, ceteris ex ordine brevioribus; oculi fere divisi, fortiter granulati; prothorax longitudinaliter carinatus et sulcatus, antice ad latera nodosus (fere ut *Prosopli*); elytra antice longitudinaliter cristatus; pedes modici robusti, tibiis intermediis simplicibus, tarsis posticis quam tibiæ vix brevioribus; acetabula intermedia aperta; prosternum postice et mesosternum antice sat fortiter declivia sed haud perpendicularia, hoc antice nullo modo dentiformi nec producto postice late sat fortiter emarginato; segmentum ventrale basale ad apicem perlonge ciliatum; unguiculi divergentes.

Fem. Antennæ quam corpus paullo breviores; segmentum ventrale apicale longitudinaliter canaliculatom.

I am unable to refer the insect for which I propose this new name to any previously described genus. M. Lacordaire [Gen. Col. IX. (2) p. 521] divides the *Niphonides* into two groups distinguished by the greater or less emargination of the eyes. I think this genus must be placed in the former of these, in which it would fall beside *Hathliodes*; but it has not at all the facies of *Hathliodes* and differs structurally from the species of that



genus *inter alia* by its strongly crested elytra and by its wide mesosternum which is strongly emarginate behind. If it be regarded as belonging to the group with the eyes not quite "subdivided" it would have to take its place in the *Symphyletes* group in which it would be distinguishable *inter alia* by its prothoracic sculpture being (not transverse but) longitudinal together with the absence of tomentose depressions on the abdomen of the male. Its real affinity seems to me to be unquestionably with *Atyporis* and *Prosoplus* which it closely resembles in facies, but it differs from both in its mesosternum being in front neither perpendicular nor in the least produced or tuberculate. This latter character, together with the third joint of its antennæ not being perceptibly shorter than the fourth distinguishes it from *Menillus*.

*C. Cowleyi*, sp. nov, Picea, pedibus antennarum basi et elytris postice rufescentibus; obscure griseo pubescens, elytris ad basin pilis elongatis flavis (in cristis 2 positis) et in medio fascia irregulari maculari (hac e pilis nonnullis albidis nonnullis flavis formata) ornatis; capite prothoraceque sat crebre ruguloso-punctulatis; hoc transversim subquadrato, in medio late leviter sulcato, sulco carina mediana instructo; elytris a basi paullo ultra medium grosse ruguloso-punctulatis et granulatis, ad apicem rotundatis, parte apicali obsolete nec rugulose punctulata, disco obsolete 2- vel 3-costato, angulis humeralibus sat rectis. Long., 6 l.; lat., 2 $\frac{2}{3}$  l.

A remarkable insect on account of the two short but strongly elevated longitudinal crests bearing long and dense yellow pilosity and placed one on either side of the scutellar region.

N. Queensland; sent to me by Mr. Cowley; also by Mr. French.

#### RHYTIPHORA.

*R. Frenchi*, sp. nov. (Fem.) Nigra, pilis niveis ornata, his in capite (ut linea oculos anguste, antennarumque articulos singulos late, cingens; et ut maculæ diversæ in genis mandibulis et clypeo positæ), in prothorace (ut lineæ transversæ 4 dorsales, his subtus dilatatis et prosterni totam superficiem vestientibus), in elytris (ut maculæ numerosissimæ et vitta densa lata lateralis basin haud plane attingens) in sternis (partem medianum minus dense vestiente et in lateribus ut maculæ nonnullæ densæ condensatis), in abdomine (sat dense distributis sed maculis numerosis denudatis interruptis) et in pedibus (totam superficiem vestientibus) dispositis; capite sat grosse punctulato, vertice longitudinaliter canaliculato; prothorace ruguloso, transversim bisulcato; elytris sparsim pergrosse punctulatis, puncturis singulis penicillas singulas

adpressas niveo-pilosas ferentibus; antennis quam corpus paullo brevioribus. Long., 18 l.; lat.,  $6\frac{1}{2}$  l.

A very fine and distinct species; independently of the pattern of snowy white pubescence the elytra are glabrous; their pattern consists of a large number of isolated and very conspicuous white spots (resulting from the presence of pilosity in each puncture) and a broad lateral stripe of very dense pilosity commencing a little behind the shoulder and almost reaching the apex; the suture moreover is bordered near its apex by a narrow line of white pilosity. The system of markings is very much like that of *Penthea Saundersi*, Pasc., but in that species *inter alia* the patches of white hairs on the elytra are much larger and less numerous and there is no white lateral vitta; the eyes are very much more coarsely granulated in the present species and it is of narrower and more elongate form; these latter characters refer it to the genus *Rhytiphora*. The elytra are rounded at the apex. The prothorax has no lateral tooth and the elytra are devoid of basal granules.

N.W. Australia; in the collection of C. French, Esq.

## EROTYLIDÆ.

### EPISCAPHULA.

*E. nigrofasciata*, sp. nov. Oblonga; glabra; nitida; sat convexa; rufa, capite antennis pedibus (tarsis exceptis) prothoracis macula basali (hac antice bilobata) scutello elytrorum sutura maculis 3 (his circa scutellum et in humeris positis) fasciis 2 latis (altera mox ante medium altera sat longe pone medium positis) apice summo et margine laterali summo prosterne parte inter coxas mesosterno metasterno et abdominis segmentis basalibus 3 nigris; capite crebre punctulato; prothorace sat transverso, ad basin haud marginato, antice modice angustato, subtiliter sat sparsim punctulato et puncturis nonnullis sat magnis impresso (his ad basin et latera versus positis, in parte basali quam apicem versus multo majoribus et profundioribus), lateribus fere rectis,—elytris vix striatis, seriatim punctulatis (seriebus postice obsoletis, 2 discoidalibus quam ceteræ multo magis perspicuis); antennarum articulo 4<sup>o</sup> quam latiori manifeste longiori. Long.,  $3\frac{1}{5}$  l.; lat.,  $1\frac{3}{10}$  l.

This species is not unlike a variety of *E. australis*, Boisd., in which the median and post-median rows of spots coalesce into fasciæ, but differs as follows: the red coloring is lighter and more inclining towards a yellowish tone, the prothoracic spot is larger and is bilobed in front, the sides of the prothorax are straighter, the fine puncturation of the prothorax is more sparse and its

coarse punctures (instead of being of equal size and depth in all parts where they occur) are much larger and deeper near the base of the segment than near its apex.

Queensland.

*E. brevicornis*, sp. nov. Oblonga, postice acuminata; nitida; glabra; convexa; supra obscure rufa, capite prothoracis macula magna basali (hac fortiter transversa et antice 4-lobata) scutello et elytrorum maculis et fasciis (fere ut *E. nigrofasciatæ* dispositis, sed maculis basalibus in basi anguste conjunctis et fascia antica latiori ultra medium attingenti nec margines laterales attingenti) nigris; subtus nigra, prosterni lateribus et segmentis ventralibus ultimis 2 obscure rufis; antennis pedibusque (tarsis rufis exceptis) nigris; capite prothoraceque fere ut *E. nigrofasciatæ*, sed hujus puncturis majoribus inter se sat æqualibus; antennis sat brevibus, articulo 4° quam latiori haud longiori.

This species is at once distinguishable from the preceding and other species (including *E. australis*) by its shorter antennæ in which the fourth joint (instead of being markedly longer than wide) is quite as wide as long. The black mark on the prothorax occupies a little more than the middle one-third of the base and extends forward beyond the middle of the segment; it is deeply bilobed in front and near its front emits on either side a lobe-like process running obliquely forward and nearly reaching the lateral margin; the extreme front also of the prothorax is narrowly black. The prosternum in front of the coxæ is much more strongly convex (almost subcarinate) on the middle line than in the allied species.

N.S. Wales; taken by Mr. Froggatt near Maitland.

*E. foveicollis*, sp. nov. Oblonga; glabra; nitida; minus convexa; rufa, capite prothoracis maculis nonnullis (sc. macula basali, macula mox intra marginem lateralem medium utrinque posita, et marginis antici parte mediana) scutello elytrorum maculis fasciisque nonnullis (sc. maculis 3 transversim ad basin dispositis, fascia mox ante medium et altera pone medium postis, et apice sat late) antennis pedibus (tarsis exceptis) mesosterno metasternoque nigris; capite fortiter (parte mediana subtiliter) punctulato; prothorace sat transverso, antice parum angustato, subtilissime sparsius punctulato et puncturis nonnullis magnis (his inter se æqualibus, ad basin et latera versus, et præsertim utrinque in fovea magna prope angulos anticos, dispositis) impresso, lateribus parum arcuatis; elytris vix striatis, seriatim puuctulatis (seriebus postice obsoletis, 2 discoidalibus quam ceteræ multo magis perspicuis); antennarum articulo 4° quam latiori paullo longiori. Long., 4 l.; lat., 1½ l.

At once distinguished from its allies by the conspicuous large and shallow depression a little within the anterior angles of the prothorax in which there is a cluster of very deep fovea-like punctures.

N. Queensland; taken by Mr. Koebele near Cairns.

THALLIS.

This genus is distinguishable from *Episcaphula* by, *inter alia*, the form of its prosternal process. In *Episcaphula* this process dilates behind the coxæ in the form of a flattened lamina widest at its hind margin which is triangularly emarginate. In *Thallis* (as at present constituted) the prosternal process is more variable but does not (at least in the Australian species) take the form specified above.

*T. Macleayi*, sp. nov. Oblonga; glabra; nitida; sat convexa; rufa, capite postice prothorace (lateribus exceptis) elytrorum parte circa scutellum fascia mediana et altera subapicali sternis in parte et abdominis maculis nigro-piceis; capite sat fortiter crebre punctulato; prothorace transverso, antice vix angustato, ad basin marginato, sparsim subtiliter punctulato puncturis majoribus confuse intermixtis, lateribus late incrassatis et intra marginem incrassatum longitudinaliter sulcatis; elytris vix striatis, seriatim punctulatis, seriebus postice minus obsoletis, interstitiis subtiliter punctulatis; processus prosternalis modice lati parte mediana convexa, apice rotundata), lateribus carinatis; antennarum articulo 3<sup>o</sup> quam 4<sup>us</sup> haud longiori. Long., 2½ l.; lat., 1 l.

Readily distinguishable from the others known to me of the genus by the broad thickened ridge-like margins of the prothorax (which are as wide as the basal joint of the antennæ is long) within which there is a deep narrow longitudinal furrow. It should be noted however that strictly speaking it is not the actual margin itself that is thickened for when the prothorax is closely examined there is seen to be a fine stria-like furrow dividing the true margin (which is normally narrow) from what is really a longitudinal ridge which to a casual glance seems to be an extension of the true margin.

N. Queensland; taken by Mr. Koebele near Cairns.

*T. perplexa*, sp. nov. Oblonga; glabra; nitida; sat convexa; rufa, capite prothorace scutello elytrorum parte circa scutellum fascia mediana et altera apicali (his in sutura anguste conjunctis) prosterno mesosterni metasternique lateribus antennis pedibusque (tarsis exceptis) nigro-vel rufo-piceis; capite sparsim sat fortiter punctulato; prothorace transverso, antice leviter angustato, ad basin marginato, fere ut caput punctulato, lateribus sat anguste incrassatis et intra partem

incrassatam longitudinaliter sulcatis; elytrorum sculptura ut *T. Macleayi* sed puncturis in seriebus paullo magis subtilibus; processu prosternali latissimo, parte mediana modice convexa postice rotundata, lateribus carinatis; antennarum articulo 3<sup>o</sup> quam 4<sup>us</sup> paullo longiori. Long.,  $2\frac{4}{5}$  l.; lat.,  $1\frac{1}{10}$  l. (vix).

As far as color and markings are concerned this species has all the appearance of being a slight and somewhat darkly colored variety of the preceding, differing chiefly in the legs and antennæ being darker, the sides of the prothorax dark and the black fasciæ of the elytra narrowly connected along the suture (the hinder one reaching the apex). But it is certainly a distinct species characterised by the sparse puncturation of its head and prothorax, the evidently fine seriate punctures of its elytra, the very much narrower incrassated space just within the true lateral margin of its prothorax, much greater width of its prosternal process, and the evidently greater length of the third joint of its antennæ.

Queensland.

*T. subvinula*, sp. nov. (Mas.) Oblonga; glabra; sat nitida; sat convexa; nigra; prothorace rufo, elytris maculis binis albido-flavis ornatis; subtus testacea; capite prothoraceque creberrime grossissime punctulatis, hoc linea lævi longitudinali angusta antice posticeque abbreviata instructo; elytris vix striatis seriatim punctulatis (puncturis in seriebus postice obsoletis), interstitiis minus distincte punctulatis; prosterno grosse punctulato, inter coxas sat late convexo, postice rotundato; antennarum articulo 3<sup>o</sup> quam 4<sup>us</sup> vix longiori; femoribus anticis subtus dente armatis; tibiis anticis curvatis. Long.,  $2\frac{1}{3}$  l.; lat.,  $1\frac{4}{5}$  l.

This species closely resembles *T. vinula*, Er., from which it differs as follows: the head and prothorax are very much more closely and coarsely punctured and the latter is a little more transverse (Erichson says that the prothorax of *vinula* is not shorter than wide, but this is not strictly accurate by measurement); the elytral punctures are decidedly stronger near the base; and the whitish markings on the elytra are smaller, being more abbreviated at both ends, so that they are spots rather than fasciæ.

S. Australia; Eyre's Peninsula.

*T. (?) venustula*, sp. nov. (Mas.) Oblonga; pubescens; sat nitida; sat convexa; rufa; capite, prothoracis macula transversa basali, scutello, elytrorum parte circa scutellum fascia latissima mediana sutura margine laterali apicalique, mesosterno, metasterno, abdominis segmentis basalibus 2, antennis



et femoribus, nigris, tibiis picescentibus; capite grosse punctulato, in medio lævi; prothorace transversim quadrato, antice haud angustato, ad basin marginato, fortiter subcrebre punctulato, marginibus lateralibus subcrenulatis; elytris haud striatis, seriatim subtilius punctulatis, seriebus postice sat obsoletis, interstitiis seriatim subtiliter punctulatis; prosterno ut *T. Macleayi*; antennarum articulo 3° quam 4<sup>as</sup> paullo longiori; femoribus anticis subtus ad basin profunde emarginatis; tibiis anticis curvatis, ad apicem extus dentatis; palpis maxillaribus magnis securiformibus.

Fem. latet. Long., 2½ l.; lat., 1 l.

Rather closely allied to *T. (?) insueta* from which it scarcely differs structurally; it is however a much smaller insect, much more nitid, its markings much more sharply defined, its prothorax very much less closely punctured, the seriate puncturation of its elytra much less strong, &c., &c. The extraordinary formation of the front legs is no doubt sexual, as I find the front legs of *T. (?) insueta* similar in the male but normal in the female (except in the external dilatation of the apex of the tibia being common to both sexes).

Victoria.

*T. (?) femoralis*, sp. nov. (Mas.) Oblonga, sat parallela; glabra; minus nitida; minus convexa; rufa; capite prothoraceque piceo-nigris, hoc latera versus dilutiori, scutello elytrorum parte circa scutellum fascia (hac mox antemedium posita) et macula apicali communi (nonnullorum exemplorum hac ad apicem vix attingenti) fere nigris; corpore subtus hic illic infuscato; capite prothoraceque grosse sat crebre punctulatis, hoc fere ut *T. venustulæ* (sculptura multo magis grossa excepta); elytris quam prothorax parum latioribus, distincte striatis, striis sat grosse punctulatis, interstitiis seriatim punctulatis, sculptura postice obsoleta; corpore subtus grosse sat crebre punctulato (abdominis apicem versus magis subtiliter); processu prosternali lato postice minus prominenti rotundato-truncato, ad latera vix carinato; antennarum articulo 3° quam 4<sup>as</sup> paullo longiori, clava minus lato; femoribus anticis prope apicem subito angulatim angustatis; tibiis anticis curvatis ad apicem extus leviter angulatim dilatatis.

Fem. pedibus simplicibus. Long., 3 l.; lat., 1 l.

This species seems to be an isolated one. Its sexual characters are much like those of *T. compta*, Er., but the facies of that insect is very different on account of its much more nitid appearance, less strong puncturation, prothorax smaller in proportion to the elytra, antennæ shorter with a more defined club.

Tasmania.

*T. (?) dentipes*, sp. nov. (Mas.) Oblongo-elongata; sat parallela; glabra; nitida sat convexa; rufa; capite, prothoracis parte postica, scutello, elytrorum angulis humeralibus fascia mediana (suturam haud attingenti) et fascia subapicali (marginem lateralem haud plane attingenti), prosterni parte postica, mesosterno, antennis, coxis anterioribus 4, et pedibus, nigris vel nigro-piceis; capite sparsim subtilius punctulato; prothorace vix transverso, antice haud angustato, margine antico antrorsum rotundatim producto, ad basin marginato, subtilius minus crebre punctulato, lateribus fere rectis; elytris vix striatis, seriatim punctulatis, seriebus postice sat obsoletis, interstitiis vix perspicue punctulatis; processu prosternali sat convexo, postice rotundato, lateribus vix carinatis; antennarum articulo 3<sup>o</sup> quam 4<sup>us</sup> paulo longiori, clava sat lata; femoribus anticis subtus prope apicem dente forti armatis, tibiis anticis fortiter curvatis.

Fem. latet. Long.,  $2\frac{1}{2}$  l.; lat.,  $\frac{7}{10}$  l.

A very elongate parallel species, easily recognisable by its markings and by the sexual characters of the male.

Victoria.

As the known Australian species of *Thallis* are now somewhat numerous it seems desirable to attempt a tabular statement of their distinctive characters. In the following attempt I have been obliged to rely upon color and markings more than I could wish on account of there being species unknown to me in nature the descriptions of which do not contain satisfactory information relating to structural characters. In the following table the names in italics are of species which I have placed from a study of their descriptions merely.

A. Upper surface glabrous.

B. Elytra with a pattern of variegated colors.

C. Elytra black or piceous around the scutellum.

D. Prothorax more or less red.

E. Margins of prothorax normal.

F. Prothorax entirely bright red.

G. A wide flat unpunctured space down middle of prothorax ... *vinula*, *Er.*

GG. The unpunctured space obsolete (*i.e.*, narrow, raised, and much abbreviated, at both ends ... *subvinula*, *Blackb.*

FF. Prothorax partly black or piceous.

G. Legs black ... .. *compta*, *Er.*

GG. Legs red ... .. *femoralis*, *Blackb.*

EE. Margins of prothorax widely increased within the lateral margin ... *Macleayi*, *Blackb.*

DD. Prothorax entirely black.

E. Prothorax very finely punctulate ... *bizonata*, *Macl.*

EE. Prothorax strongly punctulate ... *perplexa*, *Blackb.*

CC. Elytra without dark coloring round the

	scutellum ... ..	dentipes, <i>Blackb.</i>
BB.	Elytra unicolorous ... ..	janthina, <i>Er.</i>
AA.	Upper surface pubescent.	
B.	Prothorax more or less red.	
C.	Median black fascia of elytra wide and straight.	
D.	Prothorax very closely punctulate ...	insueta, <i>Crotch.</i>
DD.	Prothorax much less closely punctulate	venustula, <i>Blackb.</i>
CC.	Median fascia narrow and zigzag ... ..	<i>Erichsoni</i> , <i>Crotch.</i>
BB.	Prothorax entirely black ... ..	<i>bifasciata</i> , <i>Crotch.</i>

## ENDOMYCHIDÆ.

## CRANTEROPHORUS (gen. nov.).

Caput modicum antice modice elongatum; labrum emarginatum; mandibulæ ad apicem bispinosæ; labium fortiter transversum antice emarginatum (partis emarginatæ angulis externis spiniformibus); palpi maxillares modici, articulo ultimo oblongo subcylindrico; palpi labiales breves, articulo ultimo quam longiori triplo latiori antice truncato; mentum ante basin lateraliter utrinque spiniforme; oculi magni prominuli grosse granulati; antennæ sat graciles quam corporis dimidium longiores, articulo basali subpiriformi, 2° parvo, 3° quam præcedentes 2 sublongiori quam 4<sup>us</sup> 5<sup>us</sup> que conjuncti vix breviori (hoc quam illo sublongiori), clava sat lata 3-articulata (hujus articulis basalibus 2 intus elongatis acutis, apicali ad apicem truncato); prothorax transversim subquad-ratus, quam elytra duplo angustior, antice profunde emarginatus, ad basin profunde transversim (et utrinque breviter longitudinaliter) sulcatus; prosternum intercoxas angustissimum, postice vix prominens; mesosternum sat planatum postice angustatum; pedes sat elongati; unguiculi simplices; tarsi subtetrameri, articulo 2° sat brevi; corpus glabrum.

Type *Mycella clavicornis*, *Blackb.*

In describing the species for which I propose this new name I referred it doubtfully to *Mycella* remarking that the structure of its tarsi is not consistent with a place in that genus. I have since obtained more specimens and have been able to make a proper examination with the result that I find it must stand as the type of a new genus. The internal dilatation and angulation of the joints nine and ten of its antennæ together with the lateral angulation of its mentum suggest alliance with the South American *Epipocus* which it considerably resembles in facies. In Dr. Chapuis' tabulation of his groups of *Endomychidæ* its characters place it in the *Epipocites*. In his tabulation of the genera of that Groupe it stands beside *Epipocus* from which it is separated *inter alia* by the strong basal sulcus of its prothorax.

## STENOTARSUS.

The following two species may I think be attributed to this genus, which has not been previously recorded as Australian. As however they are both unique in my collection I have not been able to make a complete examination of their mouth organs. In respect of the other characters they agree well with Dr. Chapuis' lengthy diagnosis, the only discrepancies I observe being that the surface of the prothorax is not marked with longitudinal furrows (there is a wide deeply concave space on either side immediately within the sub-lateral carina, but I do not think this is what Dr. Chapuis refers to) and that the basal ventral segment is (though fully as long as the following *three* segments together) scarcely as long as the following *four* together.

*S. arithmeticus*, sp. nov. Ovalis; sat nitidus; pilis subtilibus erectis sat dense vestitus; rufus, capite prothorace antennis pedibus (tarsis exceptis) et in elytris notis binis (sc. macula discoidali figuram 2 simulanti mox ante mediam posita et macula ovali subapicali) nigris; prothorace quam longiori plus quam duplo latiori, sparsissime punctulato, sat longe intra marginem carina longitudinali instructo et intra carinam profunde longitudinaliter concavo; elytris sparsim sat fortiter punctulatis et marginem versus foveis sat magnis (his seriatim positis et prope apicem deficientibus) impressis; antennis sat crassis, quam corporis dimidium paullo brevioribus. Long.,  $1\frac{4}{5}$  l.; lat.,  $1\frac{1}{10}$  l.

The mark resembling on one elytron the figure 2 (on the other the same reversed) immediately in front of the middle of each elytron renders this species easy to recognise.

Victoria.

*S. commodus*, sp. nov. Breviter ovalis; sat nitidus; pilis subtilibus erectis sat dense vestitus; rufus, prothorace metasterno antennis (basi excepta) femoribus et in elytris notis nonnullis (sc. macula magna communi subrotundata mox pone scutellum posita et macula sublaterali magna difformi paullo ante medium posita) nigris; prothorace fere ut præcedentis sed quam longiori triplo latiori; et antice magis angustato; elytrorum puncturis ut præcedentis sed lateribus magis rotundatis; antennis ut præcedentis. Long.,  $1\frac{4}{5}$  l. (vix); lat.,  $1\frac{1}{5}$  l.

Apart from the very different coloring and markings this insect differs from the preceding by its very evidently shorter and broader form as well as by its considerably more transverse prothorax which is more narrowed in front.

Australia. I do not know the exact habitat.

## PERIPTYCTUS (gen. nov.).

Caput modicum, antice minus elongatum; labrum antice late rotundatum; palporum maxillarium articulus ultimus ovalis, labialium crassus; antennæ sat graciles, quam corporis dimidium breviores, 11-articulatæ, articulo basali fortiter dilatato, 2° multo longiori et multo graciliori, 3° 4° que minutis, 5° elongato (quam præcedentes 2 conjuncti longiori), 6° minuto, 7° paullo longiori, 8° minuto, 9°-11° clavam elongatam (quam 5<sup>as</sup>-8<sup>as</sup> conjuncti sublongiorem) formantibus, 11° ad apicem truncato; oculi sat grosse granulati; prothorax transversus, a basi antrorsum angustatus, antice sat emarginatus, intra marginem brevi distantia obtuse carinato, mox intra carinam profunde longitudinaliter concavo, ad basin haud sulcato; elytra ovalia, ad basin vix quam prothorax latiora; scutellum fortiter transversum; prosternum antrorsum (ut *Elateridarum*) valde elongatum ad oris receptionem elongatum, inter coxas latum, postice productum, ad apicem truncatum, inter coxas et in parte postica utrinque subtiliter carinatum; mesosternum latum antice declive; abdominis segmentum basale ceteris conjunctis longitudine æquale; pedes sat graciles; tarsi subtetrameri, articulo 2° modice elongato; unguiculi simplices; corpus setis subtilibus sparsis sat elongatis vestitum.

I do not know of any previously described genus of *Endomychidæ* in which the prosternum is produced anteriorly as a "chin piece" to cover entirely the mouth organs in repose, although the character is by no means wanting among the Australian *Coccinellidæ*. The nearest approach to it that I can find in an *Endomychid* is in the diagnosis of *Cremnodes* where the prosternum is said to be "prolonged towards the mouth." The present species however could not well be placed near *Cremnodes*; working by Dr. Chapuis' tabulations of *Endomychidæ* one would have to place it in the *Lycoperdinites* beside *Coniopoda*. Its antennæ are almost as peculiar structurally as is its prosternum.

*P. russulus*, sp. nov. Ovalis; minus convexus; brunneo-rufus, prothoracis disco infuscato; sparsim sat subtiliter punctulatus, puncturis in elytris subseriatim dispositis. Long., 1 l.; lat.,  $\frac{3}{5}$  l.

Victoria; on a small fungus in rotten wood in the Alpine District.

## IDIOPHYES (gen. nov.).

Caput modicum, antice minus elongatum; labrum antice late rotundatum; palporum maxillarium articulus ultimus elongatus sub-cylindricus ad apicem acuminatus, labialium magnus subquadratus; antennæ quam corporis dimidium



breviores, robusti, 10-articulatæ, articulo basali sat crasso subpiriformi, 2° quam basalis vix angustiori subgloboso, 3°-7° multo gracilioribus filiformibus, 8°-10° clavam sat latam formantibus (8° vix, 9° sat fortiter, transversis, 10° quam præcedentes 2 conjuncti sat breviori); oculi sat grosse granulati; prothorax valde transversus, antice paullo angustatus leviter emarginatus, longe intra marginem lateralem carina longitudinali instructo, trans basin fortiter sulcato; scutellum scutiforme; elytra breviter ovalia sat fortiter convexa; prosternum inter coxas sat angustum, postice vix productum; mesosternum sat latum, postice angustatum; abdominis segmentum basale quam sequentia 3 vix longius; pedes sat graciles; tarsi subtetrameri, elongati, articulis inter se æquilatis, articulo basali quam 2<sup>us</sup> tarsorum anteriorum breviori posticorum longiori; unguiculi simplices; corpus setis gracilibus sat elongatis minus crebre vestitum.

The antennæ of the insect on which I found this genus having only ten joints and its comparatively long and slender tarsi render it easy to identify. I think it is clearly allied to *Lycoperdina* but as I have seen only one example I have not been able to investigate one or two characters that its place in Dr. Chapuis' tabulation depends upon; e.g., I cannot satisfy myself as to whether its prosternum projects slightly or not at all clear of the front coxæ.

*I. brevis*, sp. nov. Breviter ovalis, postice acuminatus; sat convexus; setis subtilibus suberectis elongatis fulvis minus crebre vestitus; fulvus, palpis pedibusque dilutioribus; prothorace quam longiori triplo latiori, parte laterali sparsim distincte punctulato, parte discoidali fere lævi angulis posticis rectis, basi quam elytrorum basis vix angustiori; scutello distincte punctulato; elytris substriatis, striis subfortiter minus crebre punctulatis. Long., 1 l. (vix); lat.,  $\frac{3}{5}$  l.

Victoria.

#### ELEOTHREPTUS (gen. nov.)

Caput modicum antice modice elongatum; labrum late leviter emarginatum; mandibuli ad apicem bifidi; palporum maxillarium et labialium articulus penultimus fortiter dilatatus, ultimo magis angusto elongato-subconico; antennæ quam corporis dimidium breviores, sat validæ, 11-articulatæ (articulo basali modico subpiriformi, 2° parvo, 3° longiori, 4° paullo breviori, 5°-8° inter se sat æqualibus quam 4<sup>us</sup> parum brevioribus, clava compacta obovata suturis inter articulos vix distinctis); oculi sat grosse granulati; prothorax fortiter transversus, æqualis, antice sat angustatus subtrun-

catus; scutellum triangulare; elytra late ovalia subdepressa, quam prothoracis basis ad basin vix latiora; prosternum inter coxas sat latum, postice truncatum vix productum; mesosternum transversum antice rotundato-truncatum; abdominis segmentum basale quam cetera conjuncta vix brevius; pedes modici; tarsi subtetrameri, articulis basalibus 2 brevibus, apicali valde elongato; unguiculi simplices; corpus setis suberectis subtilibus minus elongatis sat crebre vestitum.

This is a remarkable little insect, of facies decidedly aberrant in the *Endomychidæ* but certainly belonging to that family I think, by the structure of its mouth organs and its tarsi. It has a certain resemblance, on a casual glance, to the *Trogositid* genus *Thymalus*, though it is of much less convex form—and of course with no structural affinity thereto.

*E. punctulatus*, sp. nov. Late ovalis; minus convexus; setis suberectis vestitus; brunneo-fulvus, capitis prothoracisque parte mediana elytris et (plus minusve) corpore subtus infuscatis; capite prothoraceque distincte sat crebre, elytris dupliciter (sc. subtiliter et fortiter) minus crebre, punctulatis; prothorace quam longiori plus quam duplo latiori; elytris nec striatis nec seriatim punctulatis. Long., 1 l.; lat.,  $\frac{7}{10}$  l. (vix).

S. Australia; on a fungus on marshy ground near Port Adelaide.

#### DYSCERASPHORUS (gen. nov.)

Caput magnum, antice parum elongatum; labrum minutum; palporum maxillarium articulus ultimus elongato-ovalis ad apicem acuminatus, labialium lato transverso; antennæ breves, quam corporis dimidium multo breviores, 6-articulatæ (clava haud inclusa), articulo basali 2<sup>o</sup> sat æquali, 2<sup>o</sup> quam 3<sup>us</sup> paullo longiori, 3<sup>o</sup>-6<sup>o</sup> inter se sat æqualibus, clava triangulari quam articuli ceteri conjuncti paullo breviori haud distincte articulato fortiter dilatato; oculi parvi grossissime granulati; prothorax fortiter transversus, æqualis, antice angustatus et fortiter sinuatim emarginatus; scutellum parvum; elytra subcuneiformia, epipleuris subhorizontalibus antice latis; prosternum inter coxas sat angustum, postice paullo dilatatum et leviter productum, ad apicem truncatum; mesosternum breve transversum, antice declive; abdominis segmentum basale quam sequentia 3 conjuncta vix longius; pedes modici; tarsi subtetrameri, articulis basalibus 2 inter se sat æqualibus (ultimo quam basales 2 conjuncti subbreviori); unguiculi simplices; corpus glabrum, convexum.

This genus is a very isolated one in the *Endomychidæ* to which

its structure seems clearly to refer it. Its antennæ with only seven joints (or nine if the club be regarded as three-jointed; I cannot however satisfy myself that it is of more than one joint) render it very easy to recognise. In general appearance it bears some resemblance to species of the *Erotylid* genus *Euxestus*. The excessively coarse granulation of its small eyes is a notable character.

*D. laticeps*, sp. nov. Convexus; brevis; nitidus; rufo-brunneus; supra subtiliter (minus perspicue) sat æqualiter sat crebre punctulatus. Long.,  $\frac{4}{5}$  l.; lat.,  $\frac{1}{2}$  l.

N. Queensland; taken by Mr. Koebele near Cairns.

#### COCCINELLIDÆ.

##### EPILOACHNA.

*E. Terræ-reginæ*, (? *E. guttato-pustulata*, Fab., var. nov.). Late ovalis; pubescens; brunneo ferruginea, prothorace ad latera flavescenti; hoc crebre fortius sat æqualiter, elytris dupliciter (i.e., fere ut prothorax sed paullo minus crebre, et grosse sparsim), punctulatis. Long., 4 l.; lat., 3 l.

At once distinguishable from all its described congeners of Australia and adjacent places by its uniform red-brown color. It appears to me to be quite possibly an extreme var. of *E. guttato-pustulata*, but in any case it seems desirable that even as a variety it should bear a distinctive name.

N. Queensland; taken by Mr. Cowley, near Cairns.

##### CŒLOPHORA.

*C. nigro-vittata*, sp. nov. Late ovalis; flavo nigroque variegata; colore nigro in prothorace (ut linea basalis angulatim bis dilatata et macula discoidalis papilionis figuram simulans), in elytris (ut margo integer, vittæ 3—his a sutura discedentibus ex ordine magis elongatis, et macula subapicalis) in epipleuris (ut margo externus), in corpore subtus toto (nonnullorum exemplorum prosterni abdominisque parte excepta), et in pedibus (nonnullorum exemplorum his nihilominus, femoribus posticis exceptis, flavis) disposito; prothorace crebre distincte, elytris magis fortiter minus crebre, punctulatis; prosterno medio planato, antice acuminato, vix perspicue bicarinato; metasterno antice truncato. Long.,  $2\frac{1}{2}$  l.; lat.,  $2\frac{1}{3}$  (vix) l.

The bright yellow surface, marked on the elytra with three discoidal black vittæ, renders this species easily recognisable among its congeners. None of the vittæ are quite joined to the black color of the base; the first vitta is near and parallel to the suture and does not extend much beyond the middle of the

elytra; the second runs obliquely from the humeral callus towards the suture (not however reaching it), extends to about a quarter the length of the elytra from the apex, and in some examples is interrupted a little behind the middle of the elytra; the third also commences on the callus and runs (parallel to the lateral margin) to the neighborhood of the apex. The vitta are variable in their breadth and in some examples have a much more sinuous outline than in others. The prosternal foveæ in this species are extremely well defined.

N. Queensland; taken by Mr. Koebele near Cairns.

#### CYCLONEDA.

*C. barronensis*, sp. nov. Late ovalis, postice subacuminata; flavo nigroque variegata; colore nigro in prothorace (ut linea transversa apicalis et macula bifida basalis), in elytris (ut margo integer, macula basalis discoidalis, fascia lata mediana, et fascia lata postmediana,—nonnullorum exemplorum fasciis interruptis), in epipleuris (totis macula elongata pone humeros excepta), in corpore subtus toto (abdomine,—segmenti basalis parte mediana nihilominus nigro,—excepto) et in pedibus (horum anticorum femoribus subtus tibiis tarsisque, intermediorum tibiis tarsisque, posticorum tarsis, flavis) disposito; antennis quam capitis (oculis inclusis) latitudo paullo longioribus, articulis ultimis 2 intus sat dilatatis, apicali ad apicem truncato; clypeo antice vix emarginato; oculis sat fortiter granulatis; prothorace fortiter transverso, antice paullo angustato, crebrius subtilius punctulato, antice bisinuatim sat fortiter emarginato, marginibus parum arcuatis; elytris magis fortiter minus crebre punctulatis. Long., 2 l.; lat.,  $1\frac{3}{5}$  l.

The following characters refer this species to the genus *Neda* (as characterised by Dr. Chapuis, Gen. Col., vol. XII.):—Head free, base of antennæ free, epipleuræ without distinct foveæ, body glabrous, antennæ of 11 joints, abdominal lamellæ well-defined, base of elytra gently emarginate all across, antennæ comparatively long, prosternum without a lateral fovea, scutellum normally large. I am a little doubtful to which of Dr. Chapuis' subgenera it belongs (Crotch seems to think they should be regarded as valid genera), but on the whole it is most suitably placed I think in *Cycloneda* (*Daulis*, Muls.). It is a very pretty and conspicuous species. The black and yellow coloring of the upper surface are so mingled that it is difficult to say which should be regarded as the color of the derm. If it be regarded as black, the yellow markings are, a fascia on the prothorax narrowest in the middle where it does not reach into the basal half of the prothorax (at the actual middle however it has an angular

projection hindward which slightly widens it) and widening out laterally to occupy the whole of the lateral margins, on each elytron (*a*) a yellow mark roughly resembling a figure 3 with its base towards the suture and its points towards the base of the elytra not quite touching the margin anywhere (*b*) an elongate transverse patch (constricted in its middle) a little behind the middle of the elytra and (*c*) an oval spot close to the apex. In some examples the intermediate (*b*) yellow mark is connected in its middle by a slender line with the subbasal mark and (more broadly) at its inner extremity with the subapical mark. The black markings (regarding the derm color as yellow) are described in the Latin diagnosis above.

N. Queensland; taken by Mr. Koebele near the Barron River.

NEDA.

*N. bicolor*, Blackb. Mr. Koebele obtained in N. Queensland two specimens which I attribute to this species and which (if I am right in doing so) show it to be subject to considerable variation. One of these two examples has the prothorax widely bordered with yellow; the other is considerably larger than the type (long.,  $3\frac{1}{2}$  l.) and also differs in having a large faintly defined reddish blotch immediately behind the base, and close to the external margin, on each elytron. I can find no other differences than those I have noted, but as it is possible that the examination of more specimens may prove the larger example to represent a distinct species I will call it var. ? *picturata*.

ORCUS.

*O. Lecanii*, sp. nov. (Mas.). Subhemisphaericus; sat fortiter convexus; subtiliter minus crebre (quam *O. Australasiæ*, Boisd., paullo magis perspicue sed haud multo aliter; quam *O. Lafertei*, Muls. minus subtiliter multo magis perspicue; quam *O. punctulatus*, Blackb., multo minus crebre vix minus fortiter; quam *O. chalybeus*, Boisd., paullo minus crebre minus fortiter) punctulatus; supra obscure nigro-viridis vix auratus (labro et prothoracis margine antico testaceis exceptis); subtus (antennis palpis pedibusque inclusis) testaceis; prothorace ad latera strigoso-ruguloso; elytris ad latera minus reflexis (fere ut *O. Australasiæ*); clypeo ad latera fortiter laminato (fere ut *O. Australasiæ*); prosterni lateribus et elytrorum epipleuris foveolatis. Long.,  $2\frac{1}{3}$  l.; lat., 2 l.

Fem. prothorace antice vix testaceo-marginato; elytris minus perspicue punctulatis. Long.,  $2\frac{2}{3}$  l.; lat.,  $2\frac{1}{3}$  l.

The distinctness of the puncturation on the upper surface in the *Orci* seems to depend chiefly on the nature of the derm which



in some species is smoother than in others and shows the puncturation more conspicuously. In the present species the derm in the male example before me is very lævigata and consequently the puncturation very distinct while in the female the derm is quite coriaceous and consequently the puncturation very obscure. This species differs from all its previously described congeners by its coloration, and also from *chalybeus* by the much greater width of the dilated side pieces of its clypeus; from *cyanocephalus caelestis* and *punctulatus* by its much less strongly impressed elytral puncturation, from *Lafertei* by its less convex form, and from *Australasiæ*, *bihunulatus*, *splendens*, *ovalis*, and *nummularis* by the presence of foveæ on the elytral epipleuræ.

N. Queensland; taken by Mr. Koebele; feeds on *Lecanium depressum*.

*O. obscurus*, Blackb. This insect which I described as a var. ? of *Australasiæ* is a good species as I find that its elytral epipleuræ have a small distinct fovea, which I overlooked when I was writing the description.

## LIPERNES.

*L. gibbosus*, sp. nov. Late ovalis; valde convexus; sat nitidus; piceo-niger, vix æneo-micans; pube cinerea sat dense vestitus; subtiliter sat crebre punctulatus. Long.,  $\frac{9}{10}$  l.; lat.,  $\frac{7}{10}$  l. (vix).

Very close to *L. subviridis*, Blackb., but differing from it in the almost complete absence of an æneous tone of color and in its much greater convexity, which is most noticeable if the insect be looked at from the side when the length of the elytra is seen to be not much greater than their height; whereas in *subviridis* the length is not much less than twice the height.

N. Queensland; taken by Mr. Koebele.

*L. creber*, sp. nov. Late ovalis; valde convexus; minus nitidus; piceo-niger; pube cinerea sat dense vestitus; crebre sat fortiter punctulatus. Long.,  $\frac{3}{5}$  l.; lat.,  $\frac{1}{2}$  l.

Resembling *L. gibbosus* in form this species differs from its described congeners by its very small size and the close strong puncturation of its surface.

N. Queensland; taken by Mr. Koebele in the Cairns District.

## GYMNOSCYMNUS.

*G. explanatus*, sp. nov. Fere circularis; valde convexus: nitidus; niger, elytris maculis binis magnis rufis ornatis, capite rufo-testaceo antennis palpis pedibusque plus minusve rufescentibus, nonnullorum exemplorum corpore subtus rufescenti; supra crebrius subtiliter (latera versus et in prothorace magis fortiter) punctulatus; prothorace fortiter transverso,

hujus basi quam elytrorum basis vix angustiori; elytris ad latera late explanatis; sternis et abdominis segmento basali in parte mediana sparsim distincte punctulatis.

Var. maculis in utroque elytro conjunctis, sicut apparet vitta lata discoidalis. Long.,  $\frac{4}{5}$  l.; lat.,  $\frac{4}{5}$  l.

Very like *G. 4-maculatus*, Blackb., but *inter alia* having the head red, the prothorax more strongly punctulate and the lateral margins of the elytra much more strongly explanate. The epipleuræ of the elytra at their widest part are not much less than half as wide as the whole metasternum.

N. Queensland; taken by Mr. Koebele near Cairns.

#### PLATYOMUS.

When I characterised *Scymnodes* I had not seen *Platyomus*, but concluded that it was distinct because one of the generic characters assigned to the latter is "mesosternum carinate." Having since obtained examples of *Platyomus* I have felt obliged to regard the two genera as identical and to believe that the mesosternal carina is merely a specific character. I can find no other character whatever to distinguish *Scymnodes difficilsi*, Blackb., generically from *Platyomus* than the absence of that carina. As to the number of joints in the antennæ it is possible that my observation is at fault (although the antennæ of *S. difficilis* still appear to me only ten-jointed). But as Mulsant and Chapuis were unable to agree as to the joints in the antennæ of *Platyomus* (Mulsant counting them as ten) I do not consider this character reliable. I think therefore that *Scymnodes* should be treated as a synonym of *Platyomus* and the carination of the mesosternum (which after all is not at all strongly marked in *Platyomus lividigaster*) cease to be regarded as a generic character.

The structure of the claws in *Platyomus* (including *Scymnodes*) calls for remark. These are stated to be "appendiculate" in all the generic diagnoses. The basal piece of each claw is compressed and ends in a point directed downward. But in the males of all the species of which I have seen this sex the apical piece of the four anterior claws is very close to the basal piece and is of the same length as the downward directed point of the latter, so that these claws appear to be bifid rather than appendiculate. The males are also distinguishable by the fifth ventral segment being emarginate or at least sinuate behind.

A remarkable character of *Platyomus* consists in the great size and unusual form of the piece that should be called, I believe, the metasternal lamella. From the inner hindmargin of the middle coxa the hind suture of the piece runs obliquely and almost straight to the suture that separates the metasternum from its

episternum and reaches it scarcely in front of the middle of the episternum. This structure seems to associate these insects with *Rhizobius*. The genus *Platyomus* (as I understand it) is, then, distinguishable by the following characters:—Body pubescent; epipleuræ not foveolate; eyes not coarsely granulated nor placed obliquely; antennæ of medium length; metasternal lamellæ very large and of the form described above; abdominal lamellæ small and complete; middle of prosternum forming a raised flattened space limited on either side by a fine carina; mesosternum large and conspicuous narrowed from the front hindward (its front margin emarginate, its surface flattened, and carinate or not); claws appendiculate (the anterior subbifid in the male). It will be seen from the above that the only structural characters I can find reliable to separate *Platyomus* from all the species at present standing in *Rhizobius* are the form and granulation of the eyes, and the sexual character of the claws.

*P. cribratus*, sp. nov. (Mas.) Sat late ovalis; sat convexus; pilis albidis brevibus erectis sat dense vestitus; sat nitidus; piceo-niger; capite prothorace (basi media excepta), antennis palpis et abdominis parte apicali rufescentibus; capite sparsim subtilius, prothorace crebre subtilius, elytris crebre dupliciter (sc. subtiliter et subgrosse) punctulatis; puncturis in elytris nec versus latera nec versus apicem ullo modo minus concinne impressis; elytris pone humeros ad latera fortiter rotundato-dilatatis; mesosterno carinato; unguiculis anterioribus 4 subbifidis. Long.,  $1\frac{3}{5}$  l.; lat.,  $1\frac{1}{5}$  l.

The distinguishing characters of this species are the strong dilatation of the sides of its elytra behind the shoulders, the mixture of fine and coarse punctures on its elytra (in both which it agrees with *S. Koebelei*, Blackb.) and the uniform distribution on the elytra of these punctures which do not become feebler or less deep or close towards the sides and apex. This latter character distinguishes it from *S. Koebelei*, of which moreover the prothorax is black. The puncturation of the elytra also is throughout closer than *S. Koebelei*.

N. Queensland; taken by Mr. Koebele near Cairns.

*P. baccaiformis*, sp. nov. (Fem.) Breviter late ovalis; valde convexus; sat nitidus; pilis albidis brevibus erectis sat dense vestitus; testaceo-rufus, elytris (margine laterali et apicali latis exceptis) prosterni parte mediana meso- et metasternis et abdominis parte mediana basali piceis; capite sparsim subtilius, prothorace crebre subtilius, elytris dupliciter (sc. subtiliter et sat fortiter) punctulatis; puncturis in elytris latera apicemque versus subobsoletis; elytris pone humeros ad latera fortiter rotundato-dilatatis; mesosterno

haud carinato : unguiculis omnibus appendiculatis. Long.,  $1\frac{1}{2}$  l. ; lat.,  $1\frac{1}{3}$  l.

Near *S. Koebelei* but certainly distinct, differing widely from it in color. The present species, moreover, is shorter and broader than *S. Koebelei* and much more strongly convex, so that looked at from the side its greatest height is considerably more than half its greatest length. The post-humeral dilatation of the elytra and their puncturation are not much different from those of *S. Koebelei* but the elytral puncturation is a trifle less strong. From the bright coloring and great convexity of this insect I should have expected it to be a male, but it seems to be certainly a female.

N. Queensland ; taken by Mr. Koebele near Cairns.

*P. (Scymnodes) Koebelei*, Blackb. In this species the mesosternum is not carinate and the anterior four claws are subbifid in the male, the intermediate less markedly so than the front ones.

*P. (Scymnodes) immaculatus*, Blackb. (Mas.) Sat late ovalis ; sat convexus ; pilis albidis brevibus erectis sat dense vestitus ; piceo-niger, capite antennis palpis pedibus anticis femorum intermediorum basi tarsis abdomine et prothoracis angulis anticis summis testaceis ; capite sparsim subtilius, prothorace crebre subtilius, elytris dupliciter (sc. subtilius et sat grosse), punctulatis ; puncturis in elytris latera apicemque versus obsolescentibus ; elytris pone humeros ad latera fortiter rotundato-dilatatis ; mesosterno haud carinato ; unguiculis anterioribus subbifidis. Long.,  $1\frac{7}{10}$  l. ; lat.,  $1\frac{2}{3}$  l.

This is the insect which I originally called "var. ? *immaculatus*" of *Koebelei*. The inspection of a second specimen together with two more of *P. Koebelei* has satisfied me that it is a good species. Besides the color differences I find that the elytral puncturation of *immaculatus* is distinctly closer than of *Koebelei*.

N.S. Wales ; taken by Mr. Koebele near Gosford.

*P. (Scymnodes) fulvohirtus*, Blackb. (Mas.) Breviter late ovalis ; valde convexus ; pilis albido-fulvescentibus brevibus erectis sat dense vestitus ; totus piceo-niger, antennis abdomineque testaceis exceptis ; capite prothoraceque crebre minus subtiliter, elytris dupliciter (sc. subtilius et sat grosse) punctulatis ; puncturis in elytris latera apicemque versus paullo minus fortiter impressis ; elytris pone humeros minus fortiter rotundato-dilatatis ; mesosterno haud carinato ; unguiculis anterioribus subbifidis. Long.,  $1\frac{2}{3}$  l. ; lat.,  $1\frac{2}{3}$  l. (vix).

This is the insect which I originally called "var. ? *fulvohirtus*" of *Koebelei*. The material now before me however satisfies me that it is a distinct species. Besides great difference in color it

is distinguished from *Koebelei* by its much more closely punctured head, the less dilatation of the sides of its elytra, the stronger emargination of its fifth ventral segment, and its shorter and more convex build.

Queensland; taken by Mr. Koebele near Toowoomba.

*P. (Scymnodes) Eugeniæ*, Blackb. (Fem.) I take this to be probably the female of *P. immaculatus*, Blackb. It differs from the male of that species in its darkly colored head and front coxæ, in its anterior claws not being subbifid and in its fifth ventral segment being rounded behind. I originally considered it a possible var. of *P. Koebelei*.

*P. consimilis*, sp. nov. (Mas.) Sat late ovalis; minus convexus; pilis albidis brevibus erectis sat dense vestitus; piceo-niger, elytris macula magna apicali sanguinea ornatis, antennis palpis tibiis anticis et tarsis omnibus rufescentibus, abdomine rufo-testaceo; capite crebrius subtilius, prothorace crebrius paullo magis fortiter, elytris sat crebre sat fortiter sat æqualiter, punctulatis; elytris pone humeros ad latera sat fortiter rotundato-dilatatis; mesosterno haud carinato; unguiculis anterioribus subbifidis.

Fem. vix differt nisi segmento ventrali 5° haud emarginato et unguiculis omnibus appendiculatis. Long.,  $1\frac{3}{5}$  l.; lat.,  $1\frac{3}{10}$  l.

This species is very much like *S. Koebelei*, but differs from it in a number of characters; it is of less convex form (viewed from the side the summit of the outline curve is at the middle of the insect in *Koebelei* but considerably behind the middle in *consimilis*); the apical spot on its elytra is much larger; its head is much more closely punctulate; its elytra are much more evenly punctulate there being little or no difference *inter se* in the size of the punctures, all of which are as large and strong as the coarser punctures in *Koebelei*.

Queensland; taken by Mr. Koebele.

*P. obscuricollis*, sp. nov. (Mas.) Ovalis (minus late); sat convexus; pilis albidis (exempli typici vix fulvescentibus) brevibus erectis sat dense vestitus; piceo-niger, prothoracis macula magna utrinque posita antennis abdominisque parte apicali fulvis; capite crebrius subtilius, prothorace crebrius paullo magis fortiter, elytris dupliciter (sc. subtiliter et sat fortiter) sat crebre, punctulatis; elytrorum puncturis apicem versus magis fortiter impressis; elytris pone humeros ad latera fortiter rotundato-dilatatis; mesosterno haud carinato; unguiculis anterioribus leviter subbifidis. Long.,  $1\frac{4}{5}$  l.; lat.,  $1\frac{2}{5}$  l.

In the unique example of this insect the markings of the prothorax (perhaps variable) are most easily described if the fulvous



tint be regarded as the ground color. The black then appears as a triangle its base occupying the whole base of the segment and its apex on the middle of the disc, but from the apex the black coloring is narrowly produced forward and then dilates again along the front margin of the prothorax and is very narrowly returned along the lateral margins to join the basal black portion. The species is also notable by the coarsest puncturation of its elytra being placed near the apex, and by the sexual structure of the anterior claws being less pronounced than is usual in the genus—the apical piece of those claws being markedly longer than the projecting process of the basal piece; nevertheless the claws in question are evidently different from the hind ones. The prothorax is much less brightly colored than in the other species with markings on that segment.

Among the *Coccinellidæ* of Mr. Koebele's Queensland Expedition is an example which seems to be the female of this species. Apart from the ordinary sexual characters in the claws and fifth ventral segment I do not find any difference from the male type except in the elytral puncturation being very much closer and finer. I find nothing analogous in any other species of the genus—the females not being (so far as my observations go) punctured differently from the males. But instances of abnormal puncturation are not very rare among the Australian *Coccinellidæ* and I am disposed to regard this as probably an instance of that kind.

N. Queensland; taken by Mr. Koebele near Cairns.

*P. terminalis*, sp. nov. (Fem.) Sat late ovalis; sat convexus; pilis albido-fulvis brevibus suberectis sat dense vestitus; piceo-niger, prothoracis lateribus antennis palpis tibiis tarsis abdomineque (hoc in parte basali mediana infuscato) testaceis, elytrorum apice summo sanguineo; capite sparsim subtiliter, prothorace subtiliter vix magis crebre, elytris crebre minus subtiliter, punctulatis; elytris pone humeros ad latera modice rotundato-dilatatis; mesosterno haud carinato; unguiculis omnibus appendiculatis. Long.,  $1\frac{3}{5}$  l.; lat.,  $1\frac{1}{5}$  l.

The coloring of this species scarcely differs from that of *P. lividigaster*, Muls., except in the tibiæ being all decidedly testaceous, the middle of the abdomen blackish at the base and the extreme apex of the elytra sanguineous. From *lividigaster* it differs *inter alia* by its mesosternum not carinate and the much closer and decidedly less coarse puncturation of its elytra, but is certainly a near ally of that species.

N. Queensland; taken by Mr. Koebele near Cairns.

*P. lividigaster*, Muls. I have not seen a male of this species, and I should judge from his description that Mulsant had only the female before him. The two females that have come under my notice are both from N.S. Wales.

The following tabular statement will probably assist in distinguishing the species of this genus:—

- A. Mesosternum not carinate.  
 B. Prothorax of uniform (or nearly so) piceous color.  
 C. Apex of elytra sanguineous.  
 D. Puncturation of head sparse.  
 E. Lateral border of elytra widely sanguineous ... .. *baccaformis*, Blackb.  
 EE. Apex only of elytra sanguineous ... .. *Koebelei*, Blackb.  
 DD. Puncturation of head close ... .. *consimilis*, Blackb.  
 CC. Apex of elytra not sanguineous.  
 D. Head sparsely punctured... .. *immaculatus*, Blackb.  
 DD. Head closely punctured ... .. *fulvohirtus*, Blackb.  
 BB. Prothorax with a large testaceous or fulvous blotch on either side.  
 C. Apex of elytra sanguineous.  
 D. Elytra æneous ... .. *difficilis*, Blackb.  
 DD. Elytra pitchy black ... .. *terminalis*, Blackb.  
 CC. Elytra of uniform piceous color ... .. *obscuricollis*, Blackb.  
 AA. Mesosternum carinate.  
 B. Prothorax red (or with only some basal infuscation) ... .. *cribratus*, Blackb.  
 BB. Prothorax piceous, a large pallid blotch on either side ... .. *lividigaster*, Muls.  
 BBB. Prothorax uniformly piceous or black ... .. *Forestieri*, Muls.

#### SCYMNUS.

*S. operosus*, sp. nov. Ovals; sat nitidus; pube albida vestitus, hac inæqualiter distributa (i.e. hic et illic ut maculæ vel fasciæ condensata); niger, antennis palpis tibiis tarsisque flavis; crebre subtilissime punctulatus; prosterno medio longitudinaliter depresso; spatio depresso sat lato antrorsum leviter angustato antice obtuso utrinque subtiliter carinato; lamellis abdominalibus haud integris; sutura postice subtiliter carinata. Long., 1 l.; lat.,  $\frac{3}{5}$  l.

This species is recognisable by its entirely black upper surface with white pubescence arranged in patches; these form a narrow more or less interrupted lateral border which emits a branch from below the shoulders running about halfway across the elytron and another behind the middle of zigzag form running interruptedly to the suture. In my tabulation of *Scymnus* (Tr. R.S., S.A., 1892, pp. 248, &c.) the present species falls beside *S. simplex*, Blackb., from which its color and the peculiar arrangement of its pubescence at once separate it.

Queensland; taken by Mr. Koebele in several localities.

*S. brisbanensis*, sp. nov. Ovals; sat nitidus; pube albido-fulvescenti vestitus; niger, prothorace ad latera et elytris apicem versus dilutioribus, antennis palpis tarsisque flavis; crebre subtilissime punctulatus; prosterno medio longi-

tudinaliter depresso; spatio depresso minus lato antice angustato utrinque subtiliter carinato; elytrorum sutura haud carinata; lamellis abdominalibus haud integris. Long., 1 l.; lat.,  $\frac{7}{10}$  l.

This is a species of very obscure appearance. In my tabulation of *Scymnus* it falls beside *lubricus*, Blackb., from which it differs *inter alia* by its slightly more evident puncturation, and dark legs.

Queensland; Brisbane.

*S. impictus*, sp. nov. Ovals; sat nitidus; pube albida vestitus; totus rufo-brunneus; crebre subtilissime punctulatus; prosterno medio longitudinaliter depresso; spatio depresso sat lato fere parallelo utrinque subtiliter carinato; elytrorum sutura vix subtilissime carinata; lamellis abdominalibus haud integris. Long., 1 l.; lat.,  $\frac{3}{5}$  l.

The uniform red-brown color of this insect distinguishes it at once from all its allies. In my tabulation it falls beside *australis* from which it differs *inter alia* by its evidently more convex form and the absence of dark markings.

Queensland; taken by Mr. Koebele at Toowoomba.

*S. obumbratus*, sp. nov. Ovals; sat nitidus; pube albida vestitus; rufo-brunneus, capite (labro excepto) prothoraceque nigris; sparsim subtilissime punctulatus; prosterno medio longitudinaliter depresso; spatio depresso sat lato fere parallelo utrinque subtiliter carinato; elytrorum sutura haud carinata; lamellis abdominalibus haud integris. Long., 1 l.; lat.,  $\frac{3}{5}$  l.

Resembles the preceding which it falls beside in my tabulation, differing from it and *australis* in color and in the sparse puncturation of its elytra.

Queensland; taken by Mr. Koebele at Toowoomba.

*S. Terræ-reginæ*, sp. nov. Breviter late ovalis; sat nitidus; pube albida vestitus; pallide testaceus, elytris hic et illic indistincte obscurioribus; subtilissime sat crebre punctulatus; prosterno medio longitudinaliter depresso; spatio depresso sat lato antice minus angustato utrinque subtiliter carinato; elytrorum sutura haud carinata; lamellis abdominalibus haud integris. Long.,  $\frac{4}{5}$  l.; lat.,  $\frac{3}{5}$  l.

This species differs from its allies *inter alia* by its very small size, its short wide form and its uniformly pallid color. The darker blotches on its elytra are scarcely noticeable and look as if they were merely the thickly folded parts of the wings showing through, but on close examination they seem to be real infuscation. In my tabulation of *Scymnus* this insect falls with the preceding two beside *australis*.

N. Queensland ; taken by Mr. Koebele near Cairns ; also sent by Mr. Cowley.

*S. ementitor*, sp. nov. (Mas.) Sat late ovalis ; sat nitidus ; pube albida vestitus ; niger, capite prothorace (vitta mediana lata excepta) antennis palpis pedibusque anticis pallide flavis, abdomine (parte mediana basali excepta) tarsisque testaceo-brunneis ; capite sat crebre minus subtiliter, prothorace crebre minus subtiliter, elytris crebre dupliciter (sc. subtiliter et subfortiter) punctulatis ; prosterno medio longitudinaliter depresso ; spatio depresso minus lato antice angustato utrinque subtiliter carinato ; elytrorum sutura haud carinata ; lamellis abdominalibus haud integris.

Fem. capite et pedibus anticis (tarsis exceptis) obscuris. Long.,  $1\frac{1}{2}$  l. ; lat.,  $\frac{1}{3}$  l. (vix).

In my tabulation of *Scymnus* this species does not fall very naturally beside any there characterised ; it will stand under the heading "HH. Puncturation of elytra much better defined" on p. 249, and is at once distinguishable from all the rest of that group by its prothorax black in the middle with the sides very broadly of a pale yellow color. It bears an extraordinary resemblance to *Platyomus lividigaster*, Muls., from which it differs in generic characters and also in the less coarse puncturation of its elytra, &c.

N. Queensland ; taken by Mr. Koebele near Cairns ; also sent by Mr. Cowley from the same place.

*S. Cowleyi*, sp. nov. Sat late ovalis ; valde convexus ; sat nitidus ; pube albida densa erecta vestitus ; niger, capite prothorace elytrorum apice antennis palpis pedibus anticis (femoribus supra et subtus lineatim infuscatis) tarsis omnibus abdomineque rufo-testaceis ; capite sparsius subtilissime, prothorace crebre subtilissime, elytris crebre sat subtiliter, punctulatis ; prosterno medio longitudinaliter depresso ; spatio depresso sat lato antice acuminato utrinque subtilissime carinato ; elytrorum sutura postice subtilissime carinata ; lamellis abdominalibus haud integris. Long.,  $1\frac{3}{5}$  l. ; lat.,  $1\frac{1}{10}$  l. (vix).

In my tabulation (vide supra) this species stands beside *poonindiensis* and *Meyricki*, differing from both *inter alia* by its strongly convex form (viewed from the side the height of its elytra is not much less than their length), its rufo-testaceous prothorax and the sharply defined limit of the testaceous apical part of its elytra which is like that of *Platyomus Koebelei*. The specimens before me are probably males and it is likely that the head and front legs of the female are darker in color.

N. Queensland ; taken by Mr. Cowley near Cairns ; also by Mr. Koebele.

*S. kamerungensis*, sp. nov. (Mas.) Sat late ovalis ; sat fortiter convexus ; sat nitidus ; pube albida densa erecta vestitus ; niger, capite prothorace (macula basali angulata excepta) antennis palpis pedibus anticis tarsis omnibus abdomineque (parte antica mediana excepta) stramineis ; capite prothoraceque subtiliter sat crebre, elytris dupliciter (sc. subtiliter et—pro hoc genere—sat fortiter) sat crebre punctulatis ; prosterno medio longitudinaliter depresso ; spatio depresso minus lato antice minus angustato utrinque subtiliter carinato ; elytrorum sutura vix manifeste carinasa ; lamellis abdominalibus haud integris. Long.,  $1\frac{1}{5}$  l. ; lat., 1 l. (vix).

Fem, capite et pedibus anticis (tarsis exceptis) obscuris.

In my tabulation (vide supra) this species stands beside the preceding (*S. Cowleyi*), but is easily distinguishable from it and all its allies by the pale straw color of its prothorax with a basal black spot in the form of a triangle with its apex pointing forward (in some examples the base of the triangle a little dilated on each side) ; this spot seems constant. The species is an exceptionally pretty one.

N. Queensland ; taken by Mr. Cowley in the Cairns District, Kamerunga ; also by Mr. Koebele.

*S. mareebensis*, sp. nov. Sat late ovalis ; sat nitidus ; pube albida densa erecta vestitus ; niger, elytris ad apicem anguste rufo-marginatis, capite prothorace (hoc ad basin mediam infuscato) antennis palpis pedibus abdomineque stramineis ; capite sparsius prothorace elytrisque confertim, subtiliter punctulatis ; prosterno medio longitudinaliter depresso ; spatio depresso minus lato antice angustato utrinque subtiliter carinato ; elytrorum sutura postice subtilissime carinata ; lamellis abdominalibus haud integris. Long., 1 l. ; lat.,  $\frac{7}{10}$  l.

In my tabulation of *Scymnus* this species stands with *flavifrons* and *tenebricosus*,—differing entirely from both in its coloring, from the latter by its larger size, from the former by its finer puncturation, &c. It is probable that I have seen only the male of this species and that in the female the legs or some of them and perhaps the head are darker.

N. Queensland ; taken by Mr. Cowley and Mr. Koebele near Mareeba in the Cairns District.

*S. Styx*, sp. nov. Late ovalis ; sat nitidus ; pube albida vix fulvescentis, erecta vestitus ; niger, antennis palpis tarsisque rufescentibus ; capite sat crebre minus subtiliter, prothorace crebre minus subtiliter, elytris minus crebre sat fortiter (pro hoc genere) punctulatis ; prosterno medio longitudinaliter depresso ; spatio depresso lato antice acuminato utrinque



subtiliter carinato; elytrorum sutura postice subtiliter carinata; lamellis abdominalibus haud integris. Long.,  $1\frac{1}{3}$  l.; lat., 1 l. (vix).

This species stands near *poonindiensis* and *Meyricki* in my tabulation, differing from both in its entirely black color and also in the stronger and less close puncturation of its elytra. It also resembles *S. brisbanensis*, but is larger, wider, and much more strongly punctured. The unique example before me is probably a female and it is not unlikely that the front tibiae and perhaps the head of the male are rufescent.

Australia; exact habitat uncertain; taken by Mr. Koebele.

*S. subclarus*, sp. nov. (Mas.) Sat late ovalis; sat nitidus; pube albida erecta vestitus; niger, capite prothoracis lateribus antennis palpis tibiis tarsisque laete flavis, abdomine brunneo testaceo; capite prothoraceque sparsius subtiliter, elytris sparsius sat fortiter (pro hoc genere) punctulatis; prosterno medio longitudinaliter depresso; spatio depresso modice lato subparallelo utrinque subtiliter carinato; elytrorum sutura haud carinata; lamellis abdominalibus haud integris. Long., 1 l.; lat.,  $\frac{7}{10}$  l.

This species seems to oscillate between the groups of *poonindiensis* and *flavifrons* in my tabulation, as it is exactly of the size which I selected as the limit of those groups. It can however be at once separated from all the described species in both groups by the markings of its prothorax which consist of a bright yellow and very sharply defined marginal spot on each side. It comes near the preceding species (*S. Styx*) in the puncturation of its elytra but differs widely in color in less convex form and in its prothoracic puncturation. The unique type is a male; probably the female has darker front tibiae and head.

Victoria; Alpine region.

*S. subevanidus*, sp. nov. Sat late ovalis; modice convexus; sat nitidus; setis erectis elongatis pallidis sparsim vestitus; niger, antennis palpis pedibusque testaceis; capite prothoraceque sat laevibus, elytris grosse sparsim punctulatis; elytrorum sutura haud carinata; lamellis abdominalibus haud integris. Long.,  $\frac{1}{2}$  l. (vix); lat.,  $\frac{3}{10}$  l.

The unique example of this extremely minute insect has its head and prothorax bent down in a manner that precludes a sufficient examination of its prosternum but as far as I can see the median part of the prosternum is longitudinally depressed as in the preceding species. Owing to the (in this genus) very exceptional sculpture of the elytra I deem it probable that a satisfactory dissection of specimens would lead to the removal of this

species from *Scymnus* but in the absence of such an investigation I find nothing to hinder its being placed there; it has the elytral epipleuræ without distinct foveæ, incomplete abdominal lamellæ, and comparatively small metasternal lamellæ of a *Scymnus*. Its eyes however are small for a *Scymnus* and a little strongly granulated,—but without being able to specify any other clearly distinctive character I do not think it seems desirable to found a new genus on these slight peculiarities alone. The insect bears a general resemblance to *S. vagans*, Blackb., but is at once distinguishable by its incomplete abdominal lamellæ, small eyes, and very coarse (fovea-like) sparse elytral puncturation. The long sparse elytral pubescence of this insect places it in my tabulation beside *S. notescens*, to which it bears little general resemblance.

N. Queensland; taken by Mr. Koebele near Cairns.

*S. planulatus*, sp. nov. Ovalis; minus convexus; sat nitidus; pube albida suberecta vestitus; piceo-niger, elytris ante apicem antennis tarsis et abdominis apice rufescentibus; capite sparsius distincte, prothorace crebre minus distincte punctulatis; prosterno æqualiter convexo; elytrorum sutura (parte basali excepta) subtiliter sat distincte carinata; lamellis abdominalibus haud integris. Long., 1 l.; lat.,  $\frac{7}{10}$  l. (vix).

The only previously described Australian *Scymnus* having the abdominal lamellæ incomplete and the prosternum not longitudinally carinate in the middle is *S. inusitatus*, Blackb., which apart from color differs from the present species *inter alia* by its much more convex form and stronger puncturation. The elytra of this insect bear an ill defined reddish blotch behind the middle but which does not attain either the lateral margin or the apex.

N.S. Wales; taken by Mr. Koebele at Paramatta, on *Eucalyptus*.

*S. mitior*, sp. nov. Sat late ovalis; sat convexus; sat nitidus; pube albida erecta vestitus; rufus, nigro-variegatus (colore nigro prothoracis vittam latam medianam antice abbreviatam, et elytrorum vittam suturalem postice abbreviatam circa scutellum dilatatam et pone medium ut fascia margines attingens dilatatam, formanti), sternis mediis et abdominis basi plus minusve infuscatis; capite prothoraceque subtiliter sat crebre, elytris crebre sed paullo minus subtiliter, punctulatis; prosterno æqualiter convexo; elytrorum sutura vix manifeste prope apicem carinata; lamellis abdominalibus integris. Long., 1 l.; lat.,  $\frac{7}{10}$  l.

In my tabulation of *Scymnus* this species stands beside *parallelus*, Blackb., from which it differs by its oval form, totally distinct markings, &c. The first ventral suture (though much

less strongly marked than the second) is less enfeebled in the middle than in most Australian *Scymni*.

N. Queensland; taken by Mr. Koebele near Cairns.

*S. ambulans*, sp. nov. Sat late ovalis; modice convexus; sat nitidus; pube albida erecta vestitus; brunneo-testaceus, elytris totis piceo-nigris, prothorace sternorum parte mediana femoribusque plus minusve infuscatis; capite sparsius distincte, prothorace elytrisqve vix distincte, punctulatis; prosterno medio longitudinaliter depresso, spatio depresso minus lato antice angustato utrinque subtiliter carinato; elytrorum sutura vix manifeste prope apicem carinata; lamellis abdominalibus integris. Long.,  $1\frac{1}{3}$  l.; lat., 1 l. (vix).

In my tabulation of *Scymnus* this species stands beside *vagans*, Blackb., with which its very much larger size renders it quite incapable of confusion. The first ventral suture is less enfeebled in the middle than in most Australian *Scymni*.

N.S. Wales (Blue Mountains) and Queensland (Moreton Bay); taken by Mr. Koebele.

*S. varipes*, Blackb. Sat late ovalis; modice convexus; sat nitidus; pube fulvescenti erecta vestitus; niger, capite prothoracis angulis anticis summis antennis palpis tibiis, anticis tarsis omnibus abdomineque testaceis, tibiis iutermediis rufescentibus; capite crebrius subtilius, prothorace elytrisqve vix distincte, punctulatis; prosterno medio longitudinaliter depresso, spatio depresso minus lato antice sat angustato utrinque subtiliter carinato; elytrorum sutura postice subtiliter carinata; lamellis abdominalibus integris. Long.,  $1\frac{2}{3}$  l.; lat.,  $1\frac{1}{3}$  l.

Stands in my tabulation with the preceding and *S. vagans*,—differing from both *inter alia* by its larger size, and its undersurface black except the testaceous abdomen. The first ventral suture is less enfeebled in the middle than in most Australian *Scymni*.

This is the insect formerly mentioned by me as *Scymnodes varipes* (? var. of *S. Koebelei*). It has not however the antennæ or the metasternal lamellæ (both, in my opinion, essential characters) of *Platyomus* (*Scymnodes*) but of *Scymnus* and therefore notwithstanding its general facies of *Platyomus* I have no hesitation in placing it in *Scymnus*. I regret that when I formerly mentioned this insect I had not observed the form of the metasternal lamellæ in *Platyomus* (a character that seems to have escaped the notice of other authors also) and so erroneously referred this insect to that genus.

Queensland; taken by Mr. Koebele near Toowoomba on *Eugenia*.

*S. yarrensis*, sp. nov. Elongato-ovalis; minus convexus; sat nitidus; pube albida vestitus; nigro-piceus, capite prothoracis lateribus in utroque elytro vitta dorsali (vittis duabus his postice inter se conjunctis) antennnis palpis pedibus abdomineque postice testaceis; capite sparsius distincte, prothorace crebre subtilius, elytris crebre fere subfortiter, punctulatis; prothoracis lateribus sat fortiter rotundatis; prosterno medio longitudinaliter depresso, spatio depresso minus lato antice minus angustato utrinque subtiliter carinato; elytrorum sutura postice subtilissime carinata; lamellis abdominalibus integris. Long.,  $\frac{1}{5}$  l.; lat.,  $\frac{1}{2}$  l. (vix).

This species stands in my tabulation beside *S. parallelus*, Blackb., which it closely resembles, differing from it chiefly in the much stronger puncturation (and much more strongly rounded sides) of its prothorax. Both these species bear much resemblance to the insect which I have called *Midus* (?) *pygmæus* but are at once separated from it *inter alia* by their first ventral suture being almost entirely effaced in the middle.

Victoria; Upper Yarra; presented to me by Mr. French.

#### NOVIUS.

*N. simplicipennis*, sp. nov. Sat late ovalis; minus convexus; sat nitidus; pubescens; niger, elytris labro antennnis tarsis et abdomine (parte basali infuscata excepta) sanguineis; supra confertim subtiliter punctulatus. Long.,  $1\frac{2}{3}$  l.; lat.,  $1\frac{1}{10}$  l.

At once distinguishable from all its previously described Australian congeners *inter alia* by its coloring. *N. ruber*, Blackb., the only one of them having unicolorous red elytra, has head, prothorax, and legs also red, and is differently punctured.

Queensland; taken at Toowoomba by Mr. Koebele.

*N. discoidalis*, sp. nov. Breviter late ovalis; sat convexus; nitidus; pubescens; niger, elytrorum macula magna basin attingenti labro antennnis tarsis abdomineque (hoc ad basin infuscato) brunneo-rufis; supra subtilissime sat crebre punctulatus.

Var. elytrorum macula ad apicem continua. Long.,  $1\frac{3}{5}$  l.; lat.,  $1\frac{1}{10}$  l.

More like the preceding than any other previously described Australian *Novius*, but I do not think it possibly an extreme var. of that species since, apart from its having very distinct elytral markings, it is a larger, broader, and more convex insect with elytral puncturation certainly both finer and less close. Even should it prove to be merely a form of a very variable species it seems to be a form to which it would be convenient

that a distinctive name should appertain. In one example before me the elytral spot extends along the base from close to the suture, includes the extreme front of the lateral margin, and narrows hindward till it ceases in a sharp point considerably behind the middle and a little nearer to the suture than to the lateral margin; the spot in the other example varies inasmuch as before it reaches a point it begins to dilate again and then spreads out over the whole of the apex. The convexity of this species is very similar to that of *N. cardinalis*, Muls.

Queensland; taken by Mr. Koebele near Toowoomba.

*N. tripustulatus*, sp. nov. Breviter late ovalis; fortiter convexus; nitidus; pubescens; niger, elytrorum macula magna humerali et macula communi apicali labro antennis tarsis abdomineque (hoc ad basin infuscato) rufis; supra confertim subtiliter punctulatus. Long.,  $1\frac{2}{3}$  l.; lat.,  $1\frac{3}{10}$  l. (vix).

Differs from the preceding species, apart from markings, by its still shorter and more convex build and by its closer less fine puncturation, which resembles that of *N. simplicipennis*; its puncturation is evidently less close and somewhat finer than that of *N. cardinalis*, Muls.

N. Queensland; taken by Mr. Koebele near Cairns.

*N. limbatus*, sp. nov. Breviter late ovalis (subcircularis); valde convexus; pubescens; sanguineus, capite (labro excepto) prothorace (lateribus exceptis) et elytris (margine lato laterali et apicali excepto) piceis; supra confertim subtiliter punctulato. Long.,  $1\frac{1}{3}$  l.; lat.,  $1\frac{1}{10}$  l.

Very distinct from the previously described Australian *Novii* by its color and markings. It is a very short, wide, and extremely convex species (viewed from the side its height is not much less than the length of its elytra). The puncturation of its elytra is (for a *Novius*) decidedly strong, being stronger than in any of the preceding three species and slightly stronger than in *N. cardinalis*, Muls., but it is not quite so close as in the last named species.

N. Queensland; taken by Mr. Koebele near Cairns.

#### CYCLOSCYMNUS.

*C. concolor*, sp. nov. Late ovalis, vix circularis; nitidus; valde convexus; setis brevissimis sparsis vix perspicue vestitus; totus niger; capite vix manifeste, prothorace sparsim obsolete, elytris sparsim subfortiter, punctulatis; prosterno medio vix longitudinaliter depresso; lamellis abdominalibus haud integris; segmento ventrali apicali crebre fortiter punctulato. Long.,  $\frac{3}{5}$  l.; lat.,  $\frac{1}{2}$  l.

Quite distinct from *C. minutus*, Blackb., by its entirely black color; also differs in its less circular form and somewhat greater convexity. I have before me two examples which differ from



the type in being evidently larger (long.,  $\frac{4}{5}$  l.) and in their apical ventral segment being less strongly punctured. I judge these differences to be sexual, and the larger examples to be females.

N. Queensland; taken by Mr. Koebele near Cairns.

*C. minutus*, Blackb. In describing this insect I called it "minus fortiter punctulatus." I think this phrase liable to convey the impression of its puncturation being feebler than it actually is and that "subfortiter" would be more accurate than "minus fortiter," the puncturation of the elytra being rather strong and well-marked for a *Scymnid*.

#### SERANGIUM.

*S. bicolor*, sp. nov. Late ovalis, subcircularis; nitidus; valde convexus; setis albidis sat elongatis sparsis vestitus; niger vel piceo-niger, capite antice antennis palpis pedibus abdomineque apicem versus fulvis, nonnullorum exemplorum (? immaturorum) corpore subtus toto fulvo; fere lævis. Long.,  $\frac{4}{5}$  l.; lat.,  $\frac{7}{10}$  l. (vix).

The uniform (except on the front of the head) black color of the upper surface at once distinguishes this species from all the previously described members of the genus.

N. S. Wales; taken by Mr. Froggatt near Maitland; specimens taken by Mr. Koebele in N. Queensland do not seem to differ from those sent by Mr. Froggatt.

#### BUCOLUS.

*B. frater*, sp. nov. Sat late ovalis; sat fortiter convexus; sat nitidus; pube albida brevi erecta vestitus; piceo-niger antennis tarsis abdomineque rufis; capite prothoraceque crebre, elytris minus crebre, subfortiter punctulatis. Long.,  $1\frac{3}{5}$  l.; lat.,  $1\frac{1}{5}$  l.

This species is closely allied to that which I described as *B. convexus*, differing from it chiefly by its prothorax concolorous with the general surface and the very evidently less close puncturation of its elytra. I doubt whether these two species will remain permanently in *Bucolus*; indeed I should like to propose a new generic name for them, but cannot find any distinctive structural character that seems to me of sufficient importance for the purpose. They have the produced prosternum, the externally angular tibiæ, the strongly foveolate epipleuræ and the peculiar abdominal lamellæ of *B. Fourneti*, Muls. The last-named however differ slightly; those of *B. Fourneti* do not reach the apex of the first ventral segment and therefore are not confused with the first ventral suture; when this is the case, in most *Coccinellidæ* the lamellæ are complete but in *Bucolus* the whole lamella becomes confused externally with the general surface and its

external margin is scarcely traceable. In the present species the external margin, however, is distinctly returned *towards* the front margin of the basal segment but terminates abruptly before reaching it. The chief differences however between these species and *B. Fourneti* consist in their much greater convexity (the latter being an exceptionally depressed *Coccinellid*) and their much narrower and more horizontal elytral epipleuræ. These differences give them an extremely different facies but nevertheless seem scarcely satisfactory characters for founding a new genus. Their general appearance is that of *Cryptolæmus Montrouzieri* but that insect has non-foveolate epipleuræ, very different abdominal lamellæ, &c.

Queensland; taken by Mr. Koebele at Nerang.

*B. posticalis*, sp. nov. Sat late ovalis; sat fortiter convexus; sat nitidus; pube albida brevi erecta vestitus; piceo-niger, capite prothoracis lateribus elytrorum parte apicali tertia antennis palpis pedibus abdomineque rufis, nonnullorum exemplorum (?immaturorum) corpore subtus toto rufo; capite sparsius subtilius, prothorace crebre subtilius, elytris crebre subfortiter, punctulatis. Long.,  $1\frac{1}{2}$  l.; lat.,  $1\frac{1}{5}$  l. (vix).

This species is congeneric with and closely allied to the preceding (*B. frater*) and *B. convexus*, Blackb., but like them it seems dubiously placed when associated with *B. Fourneti*, Muls. The bright red color of the apical third part (or even a trifle more) of its elytra distinguishes it at once from its described allies. Its puncturation is much like that of *B. convexus* from which it differs by its considerably more convex form as well as in color (sc. red head and legs, prothorax black except at the sides, elytra partly red).

N. Queensland; taken by Mr. Koebele near Cairns.

#### RHIZOBIUS.

*R. Crotchi*, sp. nov. Ovalis; minus convexus; sat nitidus; pube fulva suberecta vestitus; rufus, elytris totis fusco-nigris; capite prothoraceque subtilius vix crebre, elytris subfortiter sat crebre, punctulatis; prosterno medio longitudinaliter depresso; spatio depresso minus lato, antice angustato, utrinque subtiliter carinato.

Maris segmento ventrali 5° bifoveolato, fovearum interspatio alterutræ foveæ latitudine æquali. Long.,  $2\frac{1}{2}$  l.; lat.,  $1\frac{3}{5}$  l.

In my tabulation of *Rhizobius* (Tr. R.S., S.A., 1892, pp. 257, &c.) this species stands next to *R. Bakewelli*, Crotch., thus—“EEE. Elytra unicolorous . . . *R. Crotchi*, Blackb.” It is much like *R. Bakewelli* but besides the absence of elytral marking it is smaller and has the foveæ on the fifth ventral segment

of the male much more widely apart. Compared with *R. major*, Blackb., it is much more finely punctulate.

Queensland; taken near Port Mackay.

*R. gosfordensis*, sp. nov. Elongato-ovalis; sat convexus, elytris pone scutellum fere subgibbosis, sat nitidus; pallide fulvo-pubescentis et setis erectis sparsim vestitus; rufescens, prothorace (margine antico et laterali anguste dilutiori excepta) fere nigro, elytris femoribusque picescentibus; capite prothoraceque minus fortiter subcrebre, elytris vix fortiter sat crebre, punctulatis; his in spatio communi paullo pone scutellum posito sublævibus; prosterno medio longitudinaliter depresso; spatio depresso minus lato, antice sat angustato, utrinque subtiliter carinato. Long.,  $1\frac{7}{10}$  l.; lat.,  $1\frac{1}{10}$  l. (vix).

This species is very near *R. speculifer*, Blackb., beside which it must stand in my tabulation of the genus. It is a notably narrower and more elongate insect with its elytral puncturation distinctly less strong.

N. S. Wales; taken by Mr. Koebele near Gosford.

*R. discipennis*, sp. nov. Breviter late ovalis; valde convexus, elytris pone scutellum fere subgibbosis; sat nitidus; pube albida suberecta et setis longioribus magis erectis vestitus; niger vix subæneus (nonnullis exemplis rufescentibus) antennis palpis tibiis tarsis abdomineque dilutioribus (nonnullorum exemplorum pedibus totis, vel etiam corpore subtus toto, pallidis); capite crebre distincte, prothorace crebre sat aspere, elytris sparsius subfortiter, punctulatis; his in spatio communi paullo pone scutellum lævibus, hoc spatio utrinque puncturis fortiter impressis lineatim positis marginato; prosterno medio longitudinaliter depresso; spatio depresso antice acuminato, utrinque subtiliter carinato. Long.,  $1\frac{1}{10}$  l.; lat.,  $\frac{4}{5}$  l.

In my tabulation this species must stand with the preceding species (*R. gosfordensis*) and *R. speculifer* from which it is at once distinguishable by the common unpunctured space on its elytra being bordered on either side by a well-defined line consisting of some of the largest punctures on the elytra.

N. Queensland; taken by Mr. Koebele near Cairns.

*R. eminens*, sp. nov. Sat late ovalis; fortiter convexus; sat nitidus; setis subtilibus sat elongatis erectis vestitus; rufus, elytris læte cœruleis, sterno medio subinfuscato; capite subcrebre sat fortiter, prothorace vix crebre sat fortiter, elytris sparsim fortiter, punctulatis; his in spatio communi paullo pone scutellum lævibus, hoc spatio utrinque puncturis lineatim positis marginato; prosterno medio longitudinaliter

depresso; spatio depresso antice acuminato, utrinque subtiliter carinato. Long., 1 l.; lat.,  $\frac{7}{10}$  l.

In my tabulation this species stands beside *R. caeruleus*, Blackb., from which *inter alia* its very different puncturation readily separates it. Apart from color it is near *R. discipennis* differing *inter alia* by the stronger and much less close puncturation of its elytra.

N. Queensland; taken by Mr. Koebele near Cairns.

*R. subaustralis*, sp. nov. Oblongo-ovalis; minus convexus; sat nitidus; pube brevi albida sat erecta vestitus; rufus, elytris (margine laterali sat anguste rufo excepto) piceo-nigris; capite prothoraceque leviter (nec subtiliter) sat crebre, elytris sat fortiter sat crebre æqualiter nec rugulose, punctulatis; prosterno æqualiter convexo. Long., 2 l.; lat.,  $1\frac{3}{10}$  l.

This species is closely allied to *R. australis*, Blackb., but is considerably smaller and *inter alia* its elytra are evenly and not at all rugulosely punctulate (in *R. australis* large and small punctures are crowded together in a manner that gives an appearance of rugulosity).

N. Queensland; taken by Mr. Koebele near Cairns.

